

Wyomissing Area Jr./Sr. High School



Program of Studies 2023-2024

Inspiring Excellence, One Spartan at a Time



Wyomissing Area Jr./Sr. High School
630 Evans Avenue
Wyomissing, PA 19610
(610) 374-0739
www.wyoarea.org

Updated 8.8.23

Building Administration

Principal

Dr. Corey Jones

Assistant Principals

Mr. Jason Zeigler

Mrs. Ginger Johnson

Guidance Department

Mrs. Bridget Mayberry A-K 10-12

Mrs. Dana Quinlivan L-Z 10-12

Mr. Dave Skovera A-K 7-9

Ms. Kirsten Lebo L-Z 7-9

District Administration

Superintendent of Schools

Mr. Robert Scoboria

Assistant Superintendent of Schools

Dr. Melissa Woodard

Director of Pupil Services

Dr. Jessica Lengle

Wyomissing Area School District Vision

The Wyomissing Area School District aspires to be the preeminent public educational institution; as we:

- Prepare students to excel in a highly complex global community;
- Offer rigorous academics, cutting-edge technology and enriching extracurricular opportunities;
- Attract and retain the best team of administrators and staff; and
- Create a culture built on respect, trust and integrity.

Board of School Directors

Mrs. Kate Harenza

Mrs. Rachel Kuhn

Mrs. Melissa Phillips

Mr. Steven Pottieger

Mr. Ryan Redner

Mrs. Terrie Taylor

Ms. Esmine Townsend

Mrs. Laurie Waxler

Mrs. Maria Ziolkowski

January 2023

Dear Students, Parents and Guardians of WASD,

The Wyomissing Area Jr./Sr. High School is committed to equitable access to rigorous programs, data-driven continuous improvement, ensuring that there are effective leaders and effective teachers in every building and providing a safe climate that fosters relationships with families and the surrounding community. To support these pillars of education, we are fortunate to offer a vast variety of courses and programs to meet the needs and interests of our students. Academic planning and appropriate scheduling of courses are the best strategies by which our students' diverse interests and abilities are cultivated over time at Wyomissing Area Jr./Sr. High School. This Program of Studies will offer details and perspective on the various academic options available to each and every student at Wyomissing Area Jr./Sr. High School.

While each student experience is unique, the Program of Studies at Wyomissing Area Jr./Sr. High School will introduce you to the important information necessary for making scheduling decisions. Please use this document to research course-level detail on the various offerings in order to best inform your final choice of classes. The teaching faculty, school counseling department, and administration will supplement this planning by offering feedback and guidance as students make their way through their high school career.

I encourage you to design a schedule that is personally challenging and requires you to reach, aspire and grow. Select one that will allow you to balance your academic priorities with the rest of your in and out of school responsibilities. Most of all, I urge you to take full advantage of the high-quality educational opportunities available for you at Wyomissing Area Jr./Sr. High School. We welcome your partnership as we strive to Inspire Excellence, One Spartan at a Time!
Yours in education,

Dr. Corey Jones
Principal, Wyomissing Area Jr./Sr. High School

Please Note:

*All students must turn in parent signed course selection sheets to their homeroom teachers on or before **February 13, 2023***

Students choose electives based on interests and graduation requirements. Students must sequentially designate their electives of choice. In other words, the elective choices must be listed in order of priority from first, second, third, etc.



2023-2024 Daily Schedule

A LUNCH			B LUNCH			C LUNCH		
8:00	Warning Bell		8:00	Warning Bell		8:00	Warning Bell	
8:05-8:13	Homeroom		8:05-8:13	Homeroom		8:05-8:13	Homeroom	
8:16-8:57	PD 1		8:16-8:57	PD 1		8:16-8:57	PD 1	
9:00-9:41	PD 2		9:00-9:41	PD 2		9:00-9:41	PD 2	
9:44-10:25	PD 3		9:44-10:25	PD 3		9:44-10:25	PD 3	
10:28-11:09	PD 4		10:28-11:09	PD 4		10:28-11:09	PD 4	
11:09-11:39	A LUNCH		11:12-11:53	PD 5/6		11:12-11:53	PD 5/6	
11:42-12:23	PD 6/7		11:53-12:23	B LUNCH		11:56-12:37	PD 7/8	
12:26-1:07	PD 8/9		12:26-1:07	PD 8/9		12:37-1:07	C LUNCH	
1:10-1:51	PD 10		1:10-1:51	PD 10		1:10-1:51	PD 10	
1:54-2:35	PD 11		1:54-2:35	PD 11		1:54-2:35	PD 11	
2:35-3:05	After School Activities		2:35-3:05	After School Activities		2:35-3:05	After School Activities	



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Policies & Programs

Grading Philosophy - Grades are a direct reflection of achievement; students earn the grades that they receive. All subjects are taught in a manner consistent with achieving the highest level of student success. A student's final grade is a function of the teacher's determination of the student's earned grade.

Wyomissing Area Junior-Senior High School assigns higher weight to each succeeding marking period and semester exam as the school year unfolds; i.e., the second quarter is weighted more than the first quarter, the 3rd quarter, more than the 2nd, and the 4th, more than the 3rd. In addition, the 2nd semester exam grade carries more weight than the first semester exam.

The reason for this is twofold. First, the weight increase reflects the fact that the difficulty and workload of courses increase as the school year unfolds. Secondly, the increase in weight motivates students to continue to work hard during the entire year.

Students who are not in school for the entire year will receive individual consideration in determining the final grade. In all cases, the teacher has the responsibility to ensure that the final grade accurately reflects student performance for the school year.

3 A Exemption – Any student in grades 7-12 who receives 3 quarter grades of “A” (2 of which must be in the 3rd and 4th quarters), a “B” or higher for the other quarter grade, and a “C” or higher for the 1st semester midterm exam, will be exempt from taking the 2nd semester final exam.

3 F Policy - Students who receive 3 F's in any 3 quarters in a course will receive a final F for the course (2 quarter F's in a semester course).

Courses Graded With O, S, or U - Courses graded with O, S, and U are not counted in the honor roll or GPA calculation.

7 to 12 Honor Roll - is calculated quarterly on a non-cumulative basis according to a student's non-weighted GPA. Seventh and eighth grade courses graded with O, S, and U are not used for honor roll calculation.

High Honors: 3.5 – 4.0
Honors: 3.0 – 3.49
Commended: 2.5 – 2.99

Promotion - Placement into a grade level homeroom necessitates the satisfactory completion of a minimum number of credits in order to assure the potential graduation of a student after Grade 12. Thus, a student who would not have sufficient credits for graduation if he/she would

satisfactorily complete all scheduled courses in Grade 12, would not be placed in a 12th grade homeroom.

<u>Placement in Grade:</u>	<u>Required Completion of:</u>
8	Pass 3 major subjects in Grade 7
9	Pass 3 major subjects in Grade 8
10	6.0 credits
11	12.0 credits
12	18.0 credits

Students must be enrolled in the following number of minimum credits each academic year regardless of the number of cumulative credits they have earned:

9	6.0 credits
10	6.0 credits
11	6.0 credits
12	5.0 credits

Course Credit - All passed courses in grades 9 through 12 accrue credit toward graduation using the following formula:

6 periods/cycle for 1 year	= 1.0 credit
6 periods/cycle for $\frac{1}{2}$ year	= .5 credit
6 periods/cycle for $\frac{1}{4}$ year	= .25 credit
3 periods/cycle for 1 year	= .5 credit
3 periods/cycle for $\frac{1}{2}$ year	= .25 credit

In certain instances, and with teacher/administrative approval, students opting for full credit for courses taken less than the allotted time must either complete an approved independent study contract which specifically details the means towards satisfying full course credit, or assume responsibility for all assignments, tests, and other course expectations assigned regularly scheduled students.

Credit By Examination/Contract Revision - Credit by examination/contract is only an option for courses in which mastery of the academic standards can be accurately measured through an examination and/or project completion process. It will be issued to a student (not already enrolled in the course) only after the following criteria are satisfactorily met:

1. The student must submit a written proposal to the Principal and subject area department chair outlining the intent and the course for completion. The deadline to submit a proposal will be the last school day of May in the school year prior to the student's eligible time to schedule the course. (Example: A proposal to get credit for a tenth-grade mathematics course would have to be made prior to the end of May of the student's ninth grade year).
2. Academic guidelines, course objectives, class textbook, and other academic requirements will be issued in June by the department chair or designee. The student, parent, department chair (or designee) and administrator, after outlining all requirements,

deadlines, and waivers/reservations of the school district, will sign an academic contract at this time.

3. All due dates for academic course requirements and grading procedures must be listed in the contract. These may vary by academic department.
4. If a student is eligible for credit, (has satisfactorily met each of the contract requirements with a minimum of 85% or higher per requirement) the credit will be assigned and the appropriate letter grade (either A or B) will be recorded on the transcript and factored into the GPA for the upcoming academic term. The student may not repeat the course if he/she achieves a final grade of between 85 percent and 100 percent.

Credit by examination/contract is not an option that can be utilized for any English, World Language, Advanced Placement, lab-based Science, or corresponding Keystone Exam course.

The learning that occurs through regular classroom attendance can never be completely reproduced in a credit by examination/contract option. The District is not responsible for elements of learning for which the student later finds him/herself deficient as a result of trading the regular classroom experience for the credit by examination/contract option.

Since many learning experiences cannot be measured by a written exam, the District offers no guarantee that any student receiving credit by examination has demonstrated the same level of mastery as those students enrolled in the course. The student accepts full responsibility for any negative consequences on student performance in other courses, standardized tests (such the SAT), and college.

Advanced Placement Courses - Since Advanced Placement (AP) courses are offered to prepare students for the Advanced Placement examination, students who enroll in AP courses must pay for and take the exam. Students needing financial assistance should see the AP Coordinator. The AP is based on the premise that secondary school students can learn college-level material. Participating colleges, in turn, grant credit and/or appropriate placement to students who have done well on the AP Examinations. A final grade of an **A, B, or C** gives an additional .25 to the GPA for AP courses. Students enrolled in an AP course may not drop that course after the second week of school when the drop/add window closes.

Students may take any AP exam without taking the AP course. Taking an AP test, however, **cannot** be substituted for course credit towards graduation.

In addition to receiving AP weight for AP courses, students who are enrolled in the Dual Enrollment program and taking college courses through the BCTC will also receive a .25 weighting for all final grades of A, B, or C.

Dropped Courses - A 7th major may be dropped without permanent record **only with administrative approval** and only if the drop is made during the first semester for year-long courses and during the first or third quarters for semester courses.

A 6th major may be dropped only under very unusual circumstances and only with the following conditions being met:

- a. administrative approval based on teacher recommendation.
- b. only at the semester break and only if a counselor-approved second semester class can be scheduled in lieu of the dropped course. The dropped course will be made part of the student's permanent record and, in the case of full credit courses, .5 credit attempted will be noted for the work completed and a failing grade will be calculated as part of the GPA. A notation of withdrawal will be recorded on the permanent record.
- c. in all cases the principal maintains final discretion as to grade and credit calculation.

When a student repeats a failed course during a subsequent school year, the original GPA is maintained and the repeated course is treated like a new course in the cumulative GPA calculations.

Summer School - All failed courses that are needed for graduation are either repeated the following year or semester or are taken through an approved Credit Recovery Program. When a course is completed, the student will receive full credit for the course but no grade higher than a S. Summer enrichment courses or repeated courses that were not failed will not be given credit but may be listed as supplemental information on the transcript.

Course Transfers - Requests for transfers between levels (i.e., honors to academic or academic to comprehensive) will not be approved without teacher and counselor recommendation with final approval subject to the principal's discretion.

Independent Study - Certain academic courses may be taken via independent study with teacher approval. Independent study is in lieu of regular class time and must substantially meet all course requirements in addition to other requirements, which the teacher may assign to make up for the lack of class time. Student work must be completed within the framework of the given academic year.

Independent Study Guidelines

- IS classes must be in the approved program of studies in order to receive a grade and credit.
- Students may not take and IS and receive a grade and credit for a class if they are already enrolled in that particular course.

Mid-Year GPA's - (For Seniors Only) - Course credit for full year courses is adjusted by multiplying the full year credit by 0.5. Course credit for semester or quarter courses remains unchanged. Quality points are calculated by multiplying adjusted course credit by 4 for A, 3 for B, etc. Honors weight is calculated by giving 0.1 to each honors course, full year or semester, in which a grade of A or B is earned. AP weight, by .125. Unweighted GPA is calculated by dividing the cumulative quality points by the cumulative credits attempted. Weighted GPA is calculated by adding to the unweighted GPA the cumulative honors weight divided by:

3.5 if the student is in the 12th grade

2.5 if the student is in the 11th grade

1.5 if the student is in the 10th grade

0.5 if the student is in the 9th grade

End of Year GPA's - Quality Points are calculated by adding course credit by 4 for A, 3 for B, etc. Honors weight is calculated by multiplying honors course credit by 0.2 and AP courses by .25, if grade was A, B, or C. Semester courses (or equivalent 90 day courses), which carry 0.5 credit, will thereby get 0.1 honors weight and .125 for AP semester. Unweighted GPA is calculated by dividing the cumulative quality points by the cumulative credits attempted. Weighted GPA is calculated by adding to the unweighted GPA the cumulative honors weight divided by:

- 4 if the student has completed the 12th grade
- 3 if the student has completed the 11th grade
- 2 if the student has completed the 10th grade
- 1 if the student has completed the 9th grade

GPA and Grading Considerations for Incoming Students - The grade equivalents and course tracking designations (AP, honors, accelerated, advanced) provided by the student's former school are used and computed using Wyomissing's credit values. Incoming seniors who would experience a significant drop in rank if entered into our GPA system, will be offered the opportunity not to be a part of the class rank with an explanation on the transcript.

Graduation Requirements - Graduation requirements are for subjects taken in grades 9, 10, 11, and 12. Wyomissing Area Jr./Sr. High students need 23.0 total credits to graduate. Courses taken in seventh and eighth grade do not accrue credit toward graduation. Students must also take end of course Keystone Exams in Biology, Algebra 1, and English Literature to fulfill their graduation requirements. Students may be asked to retake each exam until they earn a proficient score for Keystone exam.

English	4.0
Science	3.0
Mathematics	3.0
Social Studies	3.0
Arts/Humanities	2.0
Computer Technology	0.5
Health/Physical Education	1.25
Family & Consumer Science	0.25
Electives	6.0
Total Credits	23.0

NOTE: Exceptions to these requirements may be made at the discretion of the administration.

Keystone Exams

The Keystone Exams are end-of-course assessments designed to assess proficiency in core subject areas. Proficient scores on individual subject exams, as well as a composite score of 4452 will fulfill Act 158 Graduation requirements beginning with the Class of 2023. Keystone Exams will help school districts guide students toward meeting state standards. Students will

take each Keystone Exam after they complete the corresponding course (Biology, Algebra 1 and English Literature).

Programs for Identified Gifted Students

The Wyomissing Area School District's K-12 Gifted Support Program provides individualized instruction and experiences in five core themes: communication, research, critical thinking/problem solving, creative expression, and self-awareness. This instruction is based on each student's Gifted Individualized Education Plan. To further the gifted program, identified students in grade 7 participate in the Gifted Writing Workshop course. This course not only focuses on improving writing skills, but it also allows gifted learners to interact with their intellectual peers while exploring discussion and research-based topics. Eighth grade students enrolled in the gifted program will complete a self-selected project to help prepare them for the academic rigor of high school by encouraging acceleration and differentiation.

Course: G500 Colloquium

1 Day/Cycle .25 Credits

The Gifted Colloquium program is available for all gifted identified students in grades 9-12. Students work within an inquiry framework, including: curricular extension, differentiated enrichment, group discussion, in-class co-operative learning opportunities; in addition to the refinement of problem solving, critical thinking and communication skills. Students will develop and deliver a presentation to a prescribed audience, based on the results of their work, as an annual culminating activity. In sum, students seek to make the most of their inherent and developed talents and provide the potential for personal success, self-fulfillment, social development and production within the school and local community.

Special Education Programs and Services

Students with identified disabilities are provided a continuum of special education service options addressing their learning and social/emotional needs. Instruction for students is modified to address their unique strengths and needs, providing for the development of basic academic skills, and presenting content material in an adapted format. Student programs are reviewed or revised annually by an Individualized Education Program (IEP) team and students are recommended for direct instruction in the special education program when their learning needs cannot be adequately accommodated within a general education program with supplementary aides and services.

The following programs are offered at Wyomissing Area Jr./Sr. High School to meet the special needs of our identified students and help them to make meaningful education gains: Life Skills Support, Autistic Support, Emotional Support, and Learning Support.

The Life Skills Support program emphasizes individual, practical learning and incorporates "real-life" social, academic and vocational experiences into the curriculum. The goal is to prepare and support students for successful participation in school and in their post-secondary plans.

The Autistic Support program is designed for students who are identified with autism. This

program emphasizes individual, practical learning to meet academic and social needs to prepare and support students for successful participation in school and in their post-secondary plans.

The Emotional Support program is designed for students who are identified as exceptional and are experiencing emotional and/or behavioral difficulties. The goal is to help students develop coping skills and replacement behaviors so that they may be successful in a general education setting and in their post-secondary plans.

The Learning Support program is designed for students who are identified as exceptional and are experiencing academic learning difficulties. The goal is to help students with their individual needs and to support their participation in the general education setting, curriculum, and in their post-secondary transition plans.

More information about Special Education programs and services may be obtained by contacting the Office of Special Education at 610-374-0739, Ext. 1112.

English Language Development (ELD) Instruction – The following courses (345-ELD Beginner, 346-ELD Intermediate, and 347-ELD Bridging) offer standards-based instruction for English learners (ELs) in reading and language arts. The program is carefully designed for ELs to accelerate their growth in language and literacy. Students are placed in either beginner, intermediate, or an advanced level of language study based upon their assessed competency in oral language, listening comprehension, written expression, and reading. Every student is evaluated annually using the WIDA Access 2.0, the English Language proficiency test, to determine ELD needs and can be reclassified after meeting the state mandated exit criteria.

Multi-Level Enrollment - Because of low enrollment, certain courses may be combined resulting in two levels meeting at the same time with one teacher e.g., Latin IV/Latin V, Accounting I/Accounting II, etc.

NCAA - The NCAA approves core courses for use in establishing the initial eligibility certification status of student-athletes. A list of NCAA approved core courses for initial eligibility is available in the counseling office. For more information regarding NCAA college-bound student athletes, contact the guidance office or go to www.eligibilitycenter.org.

Early Admission to College - Students who have achieved exceptional academic excellence in a strong academic program may apply for early college admission during their junior year. This process must be recommended by the guidance counselor and approved by the building principal. These students must have fulfilled all course and credit requirements that are required of a Wyomissing Area High School junior to be eligible to gain early admission to college for his/her senior year. Upon completion of a successful college freshman year and receipt of an official college transcript, the student will be awarded a Wyomissing Area High School diploma.

Guidance Counseling Services - The counseling program of the Wyomissing Area School District provides a variety of services dealing with the comprehensive development of students. Counselors work in cooperation with parents and staff to assist students in long-term educational

planning and problem solving. Among the services available to students, parents, staff, and graduates are the following:

1. Arrange conferences with individual students, with parents, and/or with staff as needed concerning students' personal, social, educational, and career development.
2. Distribute course selection information to students and parents and assist in scheduling the best program available for each child.
3. Provide information dealing with post high school planning, including education, financial aid, military opportunities, careers, the job market, and transition.
4. Disseminate information dealing with the Board-approved testing program, standardized testing programs required for post high school institutions, employers, and the military, etc. as well as resources available for academic enrichment and improvement.
5. Coordinate volunteer, career activities and credit recovery programs.
6. Counsel regarding summer school information and enrollment.
7. Advocate for individual students referred to RTII, SAP, and community agencies.
8. Act as a liaison for students between the home and school as needed.
9. Initiate referrals and coordinate supportive services, such as social work, Special Education, RTII, and alternative education.

Student Assistance Program (SAP) - A student who is having academic, behavioral, attendance, emotional difficulties or exhibiting any at-risk behaviors may be referred to the SAP Team which can recommend actions to remediate the issue. A referral can be made by a student, staff member or parent.

Response to Instruction and Intervention (RtII) – Multi-Tiered Systems of Support is a comprehensive, instructional framework that includes universal screening of all students, multiple tiers of instruction and support services, and an integrated data collection and assessment system to enable early identification and interventions for students academically at risk. MTSS also takes into consideration the social, emotional, and behavioral development of students. Students are given benchmark and diagnostic assessments (i.e. Study Island, IXL, CDTs) throughout the year to determine needs and eligibility, and core teachers of students at all levels utilize data to design strategic interventions and appropriate instruction. Assessments also aid in determining placement in specialized reading and/or math courses to support their identified academic needs.

Library Services – The school library exists to enrich and support the educational program of the school. The goal of the library is to provide a collection of print and electronic resources that supports the curriculum, stimulates research, and motivates independent reading. Students will become skillful and discriminate users of information.

COURSE 7000: 7TH ADVISORY

1 Credit
6 Periods/Cycle/All Year

As students transition to the Junior/Senior High School, the Seventh Grade Advisory promotes meaningful relationships between staff and students, while providing academic supports. A personalized learning environment will afford students with a structure and set of practices for examining and encouraging academic progress. Advisory is an extension of our 4 content area classes (English, math, science & social studies), and is collaboratively taught by our 7th Grade Team teachers.

COURSE: INT500 INTERNSHIP

1Credit
6 Periods/Cycle/All Year

The Internship Program at Wyomissing Area School District is offered for students in grades 11-12. The purpose of this program is to provide students with the opportunity to participate in a professional work-based experience where they learn and apply employability skills while exploring a career of interest. In addition to participating in the workplace experience, students will communicate regularly with their assigned Internship Advisor, complete weekly reflective assignments, conduct professional interviews, and compare current literature about the career to learned skills. Opportunities in career areas such as a business, a non-profit organization, a K-8 educational setting, or some other workplaces are available through the Internship Program.

Internships can be completed through an adjusted academic schedule, after school or on the weekend. Credits will be based on length of assignment with a maximum of 3 credits per school year. Internship courses receive no more than an honors level .2 weighting for a full year placement. Any semester internship (or equivalent 90 day internships) receive a .1 weighting.



OUR MISSION is to prepare all students for successful careers and higher education through a highly acclaimed, integrated academic and technical education experience.

BCTC is a premier career & technical education center with state-of-the-art learning labs. Teachers are experienced professionals with practical experience. Programs are reviewed and updated annually by local business and industry advisors.

Why BCTC?

BCTC prepares YOU for:

- Two or four-year college
- Technical or trade school
- Apprenticeship programs
- Military service
- Direct entry into the workforce

BCTC also offers students the opportunity to be involved in career and technical student organizations including SkillsUSA, HOSA, National Technical Honor Society, FCCLA, PBA, and FFA. Such organizations provide personal growth, leadership and networking opportunities.

Berks Career & Technology Center consists of two campuses:
East Campus | 3307 Friedensburg Road | Oley, PA 19547 | 610-374-4073
West Campus | 1057 County Road | Leesport, PA 19533 | 610-374-4073
Visit us online at www.berkscareer.com

Seven Career Pathways

Nearly 40 Career and Technical Education Programs

5 Dual Enrollment Academies with Reading Area Community College:

4 Technical Academies and 1 Teacher Academy

New to BCTC Penn College NOW!

Earn college credits at Penn College of Technology

Business & Information Technology

- *Business Management & Entrepreneurship (W)
- *Computer Systems Networking & Security (E)
- *IT Programming (W)

Communications

- Advertising Art & Design Tech. (W)
- **Video & Media Content Production (W) -

Construction

- Building Construction Occupations (E)
- Cabinetry & Wood Technology (E)
- Carpentry (E)
- Electrical Occupations (B)
- Heavy Equipment Operations (E)
- ***Horticulture (E)
- HVAC / Refrigeration (E)
- Masonry (E)
- Painting & Decorating (E)
- Plumbing & Heating (E)

Engineering & Manufacturing Technology

- Drafting Design Technology (W)
- *Engineering Technologies (W)
- Precision/Computerized Machining Technology (W)
- Welding Technology (W)
- Mechatronics Engineering Technology (W)

Healthcare

- Dental Occupations (E)
- Health Occupations (W)
- ****Medical Health Professions (W)
- Sports Medicine & Rehabilitative Therapy (E)

Services

- Cosmetology (B)
- Culinary Arts (B)
- *****Early Childhood Education (B)
- Protective Services – Homeland Security (E)
- Protective Services – Law Enforcement (E)
- Service Occupations (E)

Transportation

- Automotive Collision Repair Technology (B)
- Automotive Technology (B)
- Diesel Technology (E)
- Heavy Equipment Technology (E)
- Recreational & Power Equipment Technology (W)

Note:

- (B) Offered at both campuses*
- (E) East Campus only*
- (W) West Campus only*

*Technical Academy Associates Degree Program with Reading Area Community College; RACC articulation with Bloomsburg University BAS degree in Technical Leadership offered on RACC's campus.

**Formerly Communication Media Technology & Photo Imaging Technology

***PC NOW! Articulation Agreement with Penn College of Technology.

****Senior Only Program, Based at Penn State Berks & Reading Hospital.

*****Teacher Academy Associates Degree Program with Reading Area Community College; RACC articulation with Kutztown University BSED (PreK-4 Certification) program offered on RACC's campus.

BCTC DIVERSIFIED OCCUPATIONS PROGRAM

The Diversified Occupations (DO) program combines classroom instruction with on-the-job training that aligns with the career interest of high school seniors. This unique program furthers BCTC's partnership with business and industry to foster the skills needed for today's workforce. This experience is designed to integrate classroom study focused on 21st-century skills along with a planned, supervised work experience.

Career competencies and hands-on skills are developed at the job site under the direction of a designated supervisor. Related classroom theory is offered through a hybrid model of instruction at the student's high school. Maintaining employment and class attendance is essential to the successful completion of the course requirements.

The DO program is designed to:

1. Provide training in a career and technical area not presently being offered at BCTC or the sending high school.
2. Provide training for students who need an alternative form of education to meet their unique needs.

Students enrolled in the DO program are required to:

1. Be supervised on-the-job by a cooperating employer on a one-to-one basis.
2. Be visited on-the-job, at least once every 30 days by the Diversified Occupations coordinator.
3. Attend scheduled instruction and complete all required academic coursework.
4. Be employed at least 15 hours per week during or after school hours.

Instruction in the DO program encompasses the competencies necessary to succeed in today's world-of-work. Learning activities based on career planning and development are generated through hybrid instruction.



Dual Enrollment FAQ

- **What courses are available for Dual Enrollment for the 2023-2024 school year?**
(Course list is updated annually.)
 - RACC (at JSHS)
 - CHE 150 and CHE 155 - Chemistry I and II
 - MAT 210 - Statistics
 - PHY 240 - Physics I
 - ENG 125 - Introduction to Literature
 - HIS 145 - World History since 1450
 - PRG 100 - Introduction to Computer Programming
 - Alvernia University (at JSHS)
 - ED 110 - Introduction to the Teaching Profession
- **Is there a cost for me to take a Dual Enrollment course?**
 - Yes; however, the cost is significantly reduced from regular tuition fees.
 - For RACC courses held at JSHS, students can expect to pay approximately \$99 per credit with no additional fees. Tuition is payable to RACC.
 - For Alvernia course (held at JSHS), the tuition rate is \$80/credit.
 - For Albright course and lab, the tuition rate is \$625/semester.
 - Financial assistance is available for qualified students.
- **Will my Dual Enrollment credits transfer to my college of choice?**
 - RACC credit has transferred to over 780 colleges, universities and technical schools; however, each college is different. Please check with your chosen college for more information to see if they have a transfer agreement or will accept RACC credit for your course.
- **Helpful Tips:**
 - Confirm with the colleges you plan to apply to that they will accept Dual Enrollment transfer credits from the Dual Enrollment programs you choose.
 - Always refer to the dual enrollment courses using the college course titles and numbers when talking to target colleges for transfer credits.
 - Ask if the school accepts dual enrollment courses taught by high school teachers.
 - Ask what these credits will do for you (e.g. count towards general education requirements or electives, satisfy English, science, etc. requirements, enable you to take more advanced courses earlier, etc.) if you decide to attend their college.
 - Ask for the name and contact information of the person you are speaking to. Document your conversations. You may want to do this via email so you have a record of the conversation.
 - Check out www.patrac.org to learn more about transferring credits in Pennsylvania.
- **What is the difference between AP and Dual Enrollment courses?**

Both dual enrollment and AP courses are rigorous, college-level classes taught by certified Wyomissing Area teachers, and offer students an opportunity to earn college credit while in high school.

The primary difference between both is that AP courses prepare students to take the national AP exam in that subject, which is administered by the College Board. Colleges award credit based on exam scores (3 minimum but more selective colleges require 4 or 5 to award credit). Students can review score requirements for a particular school at: <https://apstudents.collegeboard.org/getting-credit-placement/search-policies>

Dual-enrollment courses are college-level courses taught by approved Wyomissing Area faculty for both high school and RACC college credit. Students must pass the course with a C or better to earn Dual Enrollment credit, which then can be transferred to their college of choice. Both AP and dual-enrollment courses are more rigorous than traditional high school courses and offer students an opportunity to have a heavier weight applied to their overall GPA.

- Must I enroll at the university for Dual Enrollment credit?

Paperwork that must be completed once you decide to enroll in a Dual Enrollment course. The paperwork is due early in the school year.

Reading Area Community College Early Admissions Option

Highly motivated high school juniors and seniors who would like to get a jump on their post-secondary education and start earning college credits can choose from multiple programs at the Reading Area Community College.

How does it work?

Early Admissions students pay tuition and fees. Early Admission courses include RACC's online and campus-based courses. The program is for high school students who are academically ready for college and want to take college courses on campus or online. High school students interested in enriching their curriculum with college course work during their junior and senior year may request consideration for the Early Admission Program. Second-semester seniors with a minimum of a 2.8 GPA may also be considered for this opportunity.

RACC's Enrollment Services staff, in consultation with your student's guidance counselor, evaluates each request on an individual basis. Students considering the Early Admission Program must exhibit maturity and demonstrate above average academic achievement (A/B average) to benefit from college-level courses. Early admission students are permitted to enroll in two (2) courses each semester and must meet the prerequisites for the courses they intend to take. Students are advised based on their academic record, intended future plans / major.

[Admissions: Early Admission for High School Students | RACC](#)

[Course Catalog - RACC Self-service](#)

- Early Admission (EA) WASD credit values: RACC course = 1 elective credit
- EA credits may count towards WASD elective credit requirements only.
- All EA credits will be unweighted WASD elective credits.
- EA credits can only be accumulated during the academic school year
 - Any course taken over the summer will count as college credit only.
- Students can accumulate a maximum 8 credits per academic year. 8 credits includes WASD courses + college courses.

- Students must complete paperwork to designate which course(s) they are counting as EA vs. college credit upon registration.
- RACC and WASD are collaborating to reduce the cost of these credits for WASD students. Students/parents will be responsible to pay \$300 for a 3-credit course. Additional support may be available for students with financial need, please contact your guidance counselor for additional information.

Albright College Science Research Institute Early Admission

Highly motivated high school juniors and seniors may apply to earn college credit at Albright College, while still enrolled in high school. Courses count towards an Albright bachelor's degree or can be [transferred](#) to other colleges or universities.

How does it work?

Albright College offers Early Admission courses – covering a variety of topics – each fall, spring and summer session. Enrolled students spend part of each week day morning taking part in classes on Albright's college campus, and earning college credit. Each Early Admission course costs \$500 and offers one unit per semester (the equivalent of 3.5 credits at most institutions). Students completing five courses (5 units/17.5 credits) over their junior and senior years of high school will have the equivalent of a full semester complete before beginning college.

SRI Early Admission Program

Focusing on innovation and entrepreneurship, this innovative research program offers opportunities for high school juniors and seniors to immediately, and concretely, apply Early Admission collegiate studies and earn even more college credit, by pairing a course of their choice with a concurrent [Science Research Institute](#) course (SPI 101).

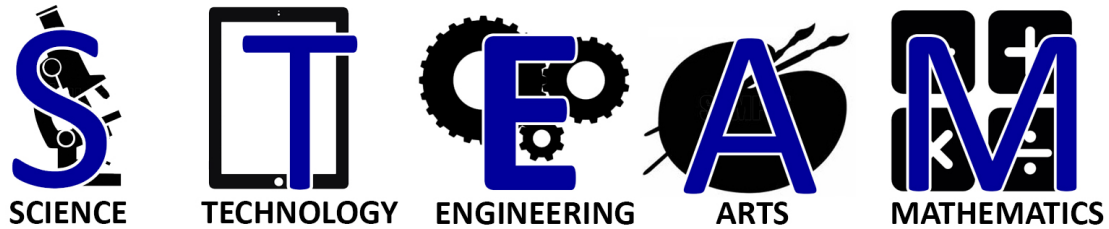
SRI Early Admission credits:

One Early Admission course (1 unit)

SPI 101 – introductory research course (.25 unit)

= 1.25 total units per semester (the equivalent of 5 credits at most institutions)

- Early Admission (EA) WASD credit values:
 - Albright course 1 elective credit
 - Albright course + SRI = 1.25 elective credits
- EA credits may count towards WASD elective credit requirements only.
- All EA credits will be unweighted WASD elective credits.
- EA credits can only be accumulated during the academic school year
 - Any course taken over the summer will count as college credit only.
- Students can accumulate a maximum 8 credits per academic year. 8 credits includes WASD courses + college courses.
- Students must complete paperwork to designate which course(s) they are counting as EA vs. college credit upon registration.
- Albright College and WASD are collaborating to reduce the cost of these credits for WASD students (with or without additional research option). Students/parents will be responsible to pay \$300 (with or without research option). Additional support may be available for students with financial need, please contact your guidance counselor for additional information.



What is STEAM?

STEAM is an educational approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking.

The end results are students who take thoughtful risks, engage in experiential learning, persist in problem-solving, embrace collaboration, and work through the creative process. These are the innovators, educators, leaders, and learners of the 21st century.

The STEAM Model

STEAM is an integrated approach to learning which requires an intentional connection between standards, assessments and lesson design/implementation.

True STEAM experiences involve two or more standards from Science, Technology, Engineering, Math and the Arts to be taught AND assessed in and through each other. Inquiry, collaboration, and an emphasis on process-based learning are at the heart of the STEAM approach. Utilizing and leveraging the integrity of the arts themselves is essential to an authentic STEAM initiative.

The STEAM Process

STEAM's foundations lie in inquiry, critical thinking, and process-based learning. The entire idea surrounding STEAM lessons and the STEAM approach is that it is based upon questioning and higher levels of critical thinking. Inquiry, curiosity, problem solving, and being creative in the finding of the solutions is at the heart of this approach.

STEAM Pathways

WASD has designed and developed specialized STEAM pathways that will allow students multiple options to acquire science, technology, engineering, arts, and mathematics knowledge and skills that will prepare them for college and/or career in a STEAM field. Through rigorous courses, innovative concepts, technology and collaboration with community partners STEAM pathways will prepare students to meet the needs of post-secondary education and the 21st century workplace.

Students interested in pursuing post-secondary education and/or a career in one of the fields below are encouraged to follow the pathways of course offerings. The *courses offer core content and skills and are recommended to be taken before graduation. Students should elect to take a combination of the elective courses of their intended pathway in addition to the core courses.

COMPUTER SCIENCE	ENGINEERING	BIOMEDICAL	APPLIED ARTS
<i>Courses below offer core content and skills of each pathway and are strongly recommended.</i>			
*Intro to C.S. (504)	*Physical Science (202 or 203)	*Biology (201, 205, 206, 212, or 213)	*Drawing (618)
*C.S. Games & Apps (505)	*Chemistry (204, 207, 210, or 238)	*Chemistry (204, 207, 210, or 238)	*Computer Art (617 or 618)
* Software Design (515, 516)	*Physics (208, 209, or 214)	*Anatomy & Phys. (220)	*Intro. To Art (604 or 605)
*AP Java or AP CS Principles (509 or 510)	*Calculus (010, 012, 020, or 021)	*Honors/AP Stats (024 or 025)	*Multimedia I (956)
* Essentials of Engineering (250)	* Essentials of Engineering (250)	*Physics (208, 209, or 214)	*Multimedia II (957)
	*Advanced Engineering (251/252)		* Essentials of Engineering (250)
COMPUTER SCIENCE	ENGINEERING	BIOMEDICAL	APPLIED ARTS
<i>Courses below are to be taken in support of and to enhance the core courses of each pathway.</i>			
AP Java (509)	Princ. of Electricity (285)	AP Biology (213)	Mixed Media Craft (622)
Computer Art (617, 618)	Environmental Science (234 or 235)	AP Chemistry (238)	Public Art (620)
Digital Photography (621)	Robotics (518 or 520)	Forensics (232)	Digital Photography (621)
AP C.S. Principles (510)	Computer Aided Drafting (950)	Drawing (618)	Computer Aided Drafting (950)
Honors C.S. Capstone (517)	Drawing (618)	*Essentials of Engineering (250)	Multimedia III (958 or 959)
	Biotechnology (230)	Biotechnology (230)	Techniques of Art (609)

What is AP Capstone?

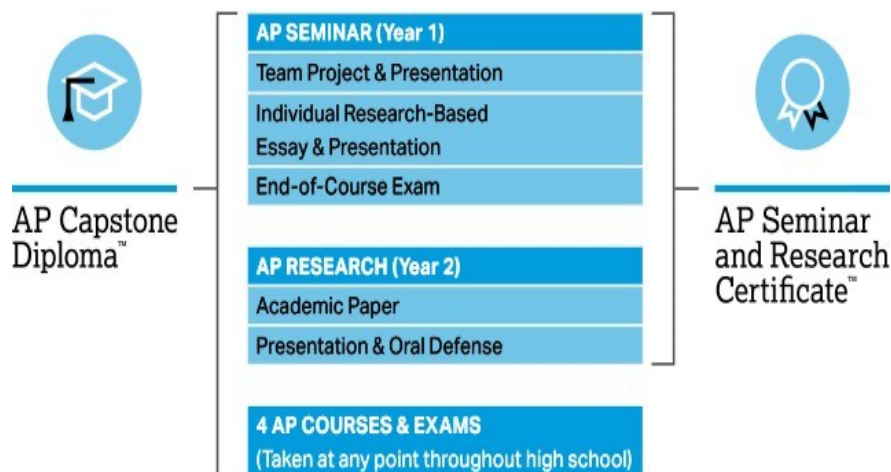
AP Capstone is the College Board's Advance Placement diploma program. **A diploma program is a program that signifies a student has completed a certain set of requirements in high school to earn an advanced diploma.** (This is in addition to your basic high school diploma.) Probably the most well-known advanced diploma program is the International Baccalaureate (IB) program.

Specifically, AP Capstone includes two foundation courses – AP Seminar (363) and AP Research (364) – to enhance four subject-specific AP courses (in any subject) for a total of six AP courses. Typically, students will choose AP classes that are interesting to them and treat them as totally separate entities. They do not have to make connections between their AP classes or the skills they require. By including AP Seminar and AP Research, the Capstone program aims to make AP a more cohesive high school program.

How AP Capstone Works

To get the AP Capstone diploma, student will schedule AP Seminar in 10th or 11th grade, followed by AP Research in the 11th or 12th grade. In addition to AP Seminar and AP Research, students will take AP classes of their choosing at any point in high school.

Students earning a 3 or higher on all these exams, will receive the AP Capstone Diploma. Students earning scores of 3 or higher in AP Research and AP Seminar, but do not take four other AP classes or do not score a 3 or better on the exams will receive the AP Seminar and Research Certificate, signifying they acquired college-level academic and research skill through the AP Program.





Source: <https://student.unsw.edu.au/student-life-internships>

Internship Program

COURSE: INT500 INTERNSHIP

Flexible Credits/Placement Dependent

The Internship Program is an honors weighted program offered for students in grades 11-12. The purpose of this program is to provide students with the opportunity to participate in a professional, work-based experience where they will learn and apply employability skills while exploring a career of interest. In addition to participating in a workplace experience, students will communicate regularly with the Internship Coordinator, complete weekly reflective assignments and conduct professional interviews focused in their chosen placements. Interns will also be expected to present their relevant experiential objectives to a prescribed audience at the conclusion of the school year. Opportunities in career areas such as a business, government, a non-profit organization, a K-8 educational setting, or other workplace environments are available through the Internship Program.

Credits will be based on length of assignment with a maximum of 3 credits per school year. Internships can be completed through an adjusted academic schedule, after school or on the weekend. Credits will be based on length of assignment with a maximum of 3 credits per school year. Examples of credits that could be earned are as follows:

0.5 Credit = 6 periods/Cycle/ Semester
 1 Credit = 6 periods/cycle/All Year
 2 Credits= 12 periods/Cycle/All Year
 3 Credits= 18 periods/Cycle/All Year

Internship Guidelines

As a participant in the Wyomissing Area High School Internship Program, you will be expected to create a professional portfolio, which will include the following elements:

1. Self-Assessment

At the beginning of the internship, describe four to six personal objectives and/or goals that you would like to accomplish during your internship. Consider including personal skill development as well as interpersonal development and the application of the knowledge base you have currently obtained through your Wyomissing Area education. The suggested length is at least 500 words. Through the internship period, come back to these objectives and comment regarding how you are (or are not) progressing on each one.

2. Weekly Journal

Each week you should capture the following information in your Professional Internship Portfolio including but not limited to:

- a) What major assignment(s) you have worked on?
- b) What was the biggest challenge that you faced this week and how did you overcome it?
- c) What was your greatest contribution to the company this week?

3. Professional Interviews

During your internship, you will be responsible for conducting interviews with two professionals in the same or a related field to your current placement. It is your responsibility to schedule the interview sessions and to create a meaningful set of interview questions.

You will create an analysis (at 500 words) of each interview. The analysis should include anything you may have learned through the interview process and opportunities the interview may have presented for your own personal growth.

You will also complete the following requirements as a part of the successful completion of the WAHS Internship Program

1. Internship Introduction

Before you begin your placement, you will attend a scheduled professional workshop to introduce you to the following applicable skills: resume creation and building, constructive networking, email etiquette and verbal and written communication skills. Every effort will be made to schedule these sessions around existing athletic and extracurricular schedules, but your attendance is mandatory.

2. Mentor Evaluations

Mentors will evaluate your progress monthly and will provide feedback on your areas of strength and your opportunities for growth.

3. Attendance

Internship students are expected to report regularly and on-time to all scheduled work periods.

Junior Reserves Training Corps (JROTC)

The Junior Reserve Officers' Training Corps (JROTC) is a federal program sponsored by the United States Armed Forces in high schools across the United States and United States military bases across the world. Beginning in the fall of 2020, Wyomissing students will be eligible to participate in JROTC through a cooperation agreement with the Wilson Area School District. Students will be transported to Wilson High School where they can participate in JROTC during period 11 as well as any after school activities.

More information about the Wilson H.S. JROTC program can be found at:

<https://sites.google.com/share.wilsonsdsd.org/wilson-junior-rotc/home>

JROTC I

**1 Credit
6 Periods/Cycle/All Year**

The first year of Leadership, Education and Training (LET) course provides an introduction into the JROTC. The program's mission is to motivate young people to be better citizens. Activities to develop leadership and management skills are stressed. This course uses military skills to teach self-discipline, confidence, and pride in communication skills, promotes and encourages citizenship through participation in community service projects, and develops leadership potential. Students are required to wear uniforms once a week.

JROTC II

**1 Credit
6 Periods/Cycle/All Year**

The second year of the Leadership, Education and Training (LET) course builds on what was learned during JROTC I, with an emphasis placed on further development of leadership ability, oral communications, drill and ceremonies, first aid skills and map reading. Students are placed in leadership positions and are expected to demonstrate the ability to work cooperatively with others. Course content prepares students to succeed both in school and after graduation. Students are required to wear uniforms once a week.

JROTC III

**1 Credit
6 Periods/Cycle/All Year**

The third year of the Leadership, Education, and Training (LET) course places more emphasis on leadership within the JROTC cadet battalion. By taking on added responsibility, students gain more leadership skills to help them succeed during and after high school. Duties and responsibilities of a leader are applied to the areas of drill and ceremonies and American citizenship. Career opportunities include ROTC scholarship and military academy programs. Students are required to wear uniforms once a week.

Wyomissing Area Jr./Sr. High School



Course Descriptions

Inspiring Excellence, One Spartan at a Time



Mathematics



7-12 Math Curriculum Map

Grade 7	Pre-Algebra			Accelerated Pre-Algebra
Grade 8	Algebra I			Accelerated Algebra I
Grade 9	Academic Algebra I		Academic Algebra II	Honors Algebra II
Grade 10	Algebra II	Academic Algebra II	Academic Geometry	Honors Geometry
Grade 11	Geometry	Academic Geometry	Advanced Algebra with Trigonometry	Honors Pre-Calculus AP Pre-Calculus
Grade 12	Algebra III with Trigonometry	Advanced Algebra with Trigonometry	AP Pre-Calculus	Honors Calculus I or AP Calculus AB
	Academic Statistics	Academic Statistics	Academic Statistics	Honors Calculus II or AP Calculus BC

- Based on PSSA, Keystone exam performance and teacher recommendation, students may move between columns.
- In any track, after completing Algebra I or Academic Algebra I, a student may “double-up” and take Geometry concurrently with any level of Algebra II.
- AP or Honors Statistics may be elected after successful completion of Algebra II. As an elective, this course is designed to be taken in addition to a primary math course and not interrupt the typical math sequence. During the senior year, AP or Honors Statistics can be utilized as a primary math course.
- Academic Statistics is designed to provide a basic understanding of descriptive and inferential statistics.

074 PRE-ALGEBRA**6 Periods/Cycle/All Year**

To prepare students for success in Algebra I and the current requirements of the 7th grade PSSA test, this course will introduce the fundamental algebra skills involving variables, expressions, and equations. The focus of this course is on mathematical discourse and problem-solving.

072 ACCELERATED PRE-ALGEBRA**6 Periods/Cycle/All Year**

This course will prepare students for Accelerated Algebra I and the 7th grade PSSA. Concepts taught in this class will include operations with integers and rational numbers, equations and expressions, inequalities, ratios and proportions, geometry, probability, area, surface area, volume, and statistics. Exponents and linear equations will also be introduced. The focus of this course is on mathematical discourse and problem-solving.

080 ACCELERATED ALGEBRA I**6 Periods/Cycle/All Year**

This course is a continuation of the arithmetic principles and their uses in algebra. The topics included are solving linear equations, exponents, polynomials, factoring, algebraic fractions, functions, systems of equations, inequalities, irrational numbers, and solving quadratic equations. Problems illustrating the uses of algebra are integrated throughout the year. Student placement in this course is dependent on teacher and counselor recommendation and final grades.

082 ALGEBRA I**1 Credit
6 Periods/Cycle/All Year**

This course is a continuation of the arithmetic principles and their uses in algebra. The topics included are solving linear equations, exponents, polynomials, factoring, algebraic fractions, functions, systems of equations, inequalities, irrational numbers, and solving quadratic equations. Problems illustrating the uses of algebra are constantly included.

075 7th GRADE MATH SKILLS DEVELOPMENT**3 Periods/Cycle/All Year**

This course will serve as an additional remediation class for Pre-Algebra. Students will be taught in a small group setting. Emphasis is on strengthening skills and proficiency in concepts both before and after regular classroom lessons. Structure of the class will consist of small group work, peer tutoring, use of computer software, and drill work.

085 8th GRADE MATH SKILLS DEVELOPMENT**3 Periods/Cycle/All Year**

This course will serve as an additional remediation class for Algebra. Students will be taught in a small group setting. Emphasis is on strengthening skills and proficiency in concepts both before and after regular classroom lessons. Structure of the class will consist of small group work, peer tutoring, use of computer software, and drill work.

005 HONORS ALGEBRA II**1 Credit
6 Periods/Cycle/All Year**

Honors Algebra II is a second-year algebra course with emphasis on mathematical proofs and on the properties and structure of algebra and number systems. The first part of the course is a reinforcement and extension of basic concepts of Algebra and then continues with topics such as: inequalities and algebraic proofs, linear equations and functions, products and factors of polynomials, rational and

irrational expressions, complex numbers, quadratic equations and functions, variation and polynomial equations, analytic geometry, exponents, logarithmic functions, sequences and series. Course 005 is a weighted honors high school course, therefore, 8TH grade students who are enrolled in 005 will receive honors weighting for successful completion of the course with a final grade of A or B. The successful completion of Algebra I or Accelerated Algebra I is a prerequisite, along with teacher recommendation.

008 ALGEBRA II

1 Credit
6 Periods/Cycle/All Year

This course stresses the basic elements of Algebra II in an introductory and non-theoretical manner. The content includes a review of the advanced skills of arithmetic and elementary algebra. Topics include, but are not limited to, fractions, decimals, percentages, algebraic fractions, and solving equations. Emphasis will be placed on further algebra topics including, but not limited to, factoring, graphing, and solving systems of equations. Topics in elementary geometry may also be included. The successful completion of Algebra I or Academic Algebra I is a prerequisite.

002 ACADEMIC ALGEBRA II

1 Credit
6 Periods/Cycle/All Year

The course is a continuation of the first course in Algebra. This course covers a review of the basic concepts of Algebra and then continues with topics on: inequalities and algebraic proofs, linear equations and functions, products and factors of polynomials, rational and irrational expressions, complex numbers, quadratic equations and functions, variation polynomial equations, and data analysis. Analytic geometry, exponential and logarithmic functions, and sequences and series may be included. The successful completion of Algebra I or Academic Algebra I is a prerequisite.

014 ALGEBRA III WITH TRIGONOMETRY

1 Credit
6 Periods/Cycle/All Year

The first semester of this course focuses on concepts from Algebra II including equations and inequalities, functions, polynomial and rational expressions and equations, radicals and complex numbers and analytic geometry. The second semester explores exponential and logarithmic functions, sequences and series, and triangle trigonometry, including identities and applications. This course is intended to bridge the gap between Algebra II and Pre-Calculus. Course admission is based on teacher recommendation and achievement in Algebra II.

030 ALGEBRA STRATEGIES I

0.5 Credit
6 Periods/Cycle/One Semester

This course is designed to improve proficiency in algebra skills for students enrolled in Algebra I. The following content areas will be emphasized: operations with real numbers and expressions, linear equations and inequalities, functions, coordinate geometry, and data analysis. Various strategies for problem solving will be emphasized and real-life applications will be stressed. Students will develop clear and accurate descriptions of their work using appropriate mathematical vocabulary. Calculator skills will be reinforced. Individual needs will be diagnosed and progress monitored.

031 ALGEBRA STRATEGIES II

0.5 Credit
6 Periods/Cycle/One Semester

This course is designed to improve proficiency in algebra skills for students enrolled in Algebra II. The following content areas will be mastered: operations with real numbers and expressions, linear

equations and inequalities, functions, coordinate geometry, and data analysis. Various strategies for problem solving will be emphasized and real-life applications will be stressed. Students will develop clear and accurate descriptions of their work using appropriate mathematical vocabulary. Calculator skills will be reinforced. Individual needs will be diagnosed and progress monitored.

015 ADVANCED ALGEBRA WITH TRIGONOMETRY

1 Credit
6 Periods/Cycle/All Year

This course serves two purposes: 1) reinforce the concepts and skills of Algebra and geometry, and 2) introduce the concepts of trigonometry and coordinate geometry. Included are topics in algebra and geometry, theory of equations, exponential and logarithmic functions, matrices, conic sections, and trigonometry. Throughout the course the functions concept is the unifying idea. Successful completion of Algebra I, Algebra II and Geometry are prerequisites.

009 HONORS PRE-CALCULUS

1 Credit
6 Periods/Cycle/All Year

Honors Pre-calculus, as a prerequisite for calculus, includes all the mathematical concepts necessary to complete a rigorous honors level high school mathematics curriculum. In addition to a review of algebra and an introduction to trigonometry, the course explores sequences, series, functions, limits, exponential and logarithmic functions, matrices, conic sections, vectors, probability and an introduction to calculus. Honors Pre-Calculus Prerequisite: Successful completion of Honors Algebra II and Honors Geometry with final grades of an A or B or successful completion of Algebra II and Geometry with the final grades of an A. Both cases also require a teacher recommendation.

001 HONORS GEOMETRY

1 Credit
6 Periods/Cycle/All Year

This course is a thorough study of two and three-dimensional geometries, including elementary analytical geometry. An emphasis is placed upon deductive reasoning in problem solving. Topics include elementary logic, lines, planes, parallelism, perpendicularity, constructions, angles, triangles, trigonometry, congruence, areas and volumes of polygons, circles, polyhedrons and spheres. Successful completion of Algebra I is a prerequisite.

006 ACADEMIC GEOMETRY

1 Credit
6 Periods/Cycle/All Year

Geometry includes the concepts of two and three-dimensional Euclidean geometry with emphasis on deductive reasoning in problem solving. The topics included are elementary logic, lines, planes, angles, perpendicularity, parallelism, triangles, congruence, inequalities, ratio and proportion, similarity, trigonometry, circles and their properties, perimeter, area, volume, coordinate geometry and constructions. Successful completion of Algebra I is required.

007 GEOMETRY

1 Credit
6 Periods/Cycle/All Year

This course stresses the elements of geometry concepts designed for the student wanting introductory, non-theoretical, entrance-level geometry and trigonometry. Concepts in two and three-dimensional Euclidean geometry are explored including points, lines, planes, polygons, and three-dimensional

figures. Special relationships between figures are investigated including properties of parallelism, similarity, congruence, right triangle relationships, and circle relationships.

012 ACADEMIC CALCULUS

1 Credit
6 Periods/Cycle/All Year

Academic Calculus is designed to review and extend the concepts of mathematics studied in previous courses and to introduce the fundamental concepts of college mathematics, especially calculus. The topics to be covered include real numbers and their properties, polynomials, factoring, algebraic fractions, linear equations and functions, exponential and logarithmic functions, probability and statistics, limits, continuity, derivatives and their applications, and integrals and their use in finding areas and volumes. Business applications of these concepts will include supply and demand functions and cost, revenue, and profit functions. Successful completion of a trigonometry course is a prerequisite. This course may not be taken for credit after successful completion of Honors or AP Calculus.

013 AP PRE-CALCULUS

1 Credit
6 Periods/Cycle/All Year

AP Pre-calculus serves two goals: providing students that plan to take AP Calculus AB/BC with a strong AP-level foundation for upper-level math, and providing college-bound students who will not take Calculus with an opportunity to explore college-level mathematics and potentially earn college credit for their success on the AP exam. In addition to a review of algebra and an introduction to trigonometry, the course explores sequences, series, functions, limits, exponential and logarithmic functions, matrices, conic sections, vectors, probability and an introduction to calculus. AP Pre-Calculus Prerequisite: Successful completion of Honors Algebra II and Honors Geometry with final grades of an A or B, or successful completion of Academic Geometry and Advanced Algebra with Trigonometry with a final grade of A or B, or successful completion of Algebra III with Trigonometry with a final grade of A. All cases also require a teacher recommendation. Students may not take Honors Pre-Calculus and then AP Pre-Calculus for credit.

010 HONORS CALCULUS

1 Credit
6 Periods/Cycle/All Year

The materials presented in Honors Calculus do not complete an advanced placement course recognized by the CEEB but can suffice to give some students advanced status at some schools in certain cases. Topics include review of previous material, limit of a function, continuity, the derivative, the definite integral, differentiation and integration of algebraic and transcendental functions, integration by parts and partial fractions. The successful completion of Honors Pre-calculus is a prerequisite.

020 HONORS CALCULUS II

1 Credit
6 Periods/Cycle/All Year

This course is the continuation of Calculus I. The course begins with a review of methods of integration. Other topics of study include polar coordinates, parametric equations, vectors, partial differentiation, multiple integrals, and infinite series. The successful completion of Honors Calculus or AP Calculus (AB) is a prerequisite.

011 AP CALCULUS (AB)**1 Credit
6 Periods/Cycle/All Year**

This course includes those few AP/AB topics not covered in Honors Calculus, a greater emphasis on proof, and AP test preparation. Topics include review of previous material, limit of a function, continuity, the derivative, the definite integral, differentiation and integration of algebraic and transcendental functions, integration by parts and partial fractions. The successful completion of Honors Pre-calculus is a prerequisite.

021 AP CALCULUS II (BC)**1 Credit
6 Periods/Cycle/All Year**

The first semester of the course will cover the C portion of the Advanced Placement BC curriculum. Topics include methods of integration, sequences and series, differential equations, and parametric equations. The second semester will cover topics beyond the BC curriculum. Emphasis will be placed on Multivariate Calculus theory and proof. Topics include vectors and vector-valued functions, functions of several variables, partial differentiation and multiple integration. The successful completion of Honors Calculus or AP Calculus (AB) is a prerequisite.

026 ACADEMIC STATISTICS – GRADES 11 - 12**1 Credit
6 Periods/Cycle/All Year**

Academic Statistics is designed to provide a basic understanding of descriptive and inferential statistics including: analyzing data and distributions, data collection; scatter plots and lines of best fit; and probability and decision making. Additional topics include informal inference and the normal distribution will be introduced when time permits for enrichment and extension. Prerequisites: Juniors must have successfully completed Algebra II and Geometry and scored proficient on the Keystone Algebra exam. Seniors must have successfully completed Algebra I. Juniors and seniors are welcome to take this course as an elective in addition to their required mathematics course.

024 HONORS STATISTICS – GRADES 10 - 12**1 Credit
6 Periods/Cycle/All Year**

Honors Statistics may be used as an elective choice in the math curriculum. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The following four themes are emphasized: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. Honors Statistics Prerequisite: Successful completion of Honors Algebra II with a final grade of an A or B or successful completion of Algebra II with the final grade of an A. Both cases also require a teacher recommendation.

025 AP STATISTICS – GRADES 10 - 12**1 Credit
6 Periods/Cycle/All Year**

In addition to the required coursework for Honors Statistics, students in AP Statistics will be required to submit additional assignments as well as statistical projects. Each student in this course will also follow the CEEB Advanced Placement syllabus and will take the Advanced Placement Statistics exam in the Spring. Prerequisite: Successful completion of Pre-calculus or successful completion of Honors Algebra II with an 'A' average. Both cases also require a teacher recommendation.

017 ACCOUNTING I – GRADES 10 - 12

1 Credit
6 Periods/Cycle/All Year

The course in Accounting I teaches the student basic understanding and appreciation of the business world in which we work and live. The study of accounting helps students to understand how business functions in society. Students are prepared for employment and are encouraged to keep accurate records of their finances and to budget their incomes wisely. Accounting I, which deals with sole proprietorship bookkeeping, will also help the person who plans to operate his own business to keep the records necessary to ensure success. Students keep records in journals and ledgers, learn the basics of financial statements, and complete a simulation of accounting practices for a sole proprietorship.

018 ACCOUNTING II – GRADES 11 - 12

1 Credit
6 Periods/Cycle/All Year

The course in Accounting II develops within the student a basic understanding and appreciation of the business world in which we live and work. The study of Accounting II helps students to understand business functions in our everyday life and what business contributes to our society. Students are encouraged to keep accurate records of their finances and budget their incomes wisely. The course is designed to help students prepare for employment in the business world or for further study of accounting after high school. The course reviews sole proprietorship bookkeeping studied in Accounting I, then deals thoroughly with varied and more complex partnership and corporate forms of ownership. Departmental Bookkeeping and Taxes are also incorporated into the Accounting II course. The successful completion of Accounting I is a prerequisite for taking this course.

019 ACCOUNTING III – GRADE 12

1 Credit
6 Periods/Cycle/All Year

The course in Accounting III provides students with an opportunity to continue their studies in accounting beyond the second-year course. The areas of Corporate Accounting, Management Accounting and Cost Accounting are explored. International Accounting and Business practices are examined through various Internet projects. Students are also required to enter the Annual Essay Contest sponsored by the Reading Chapter of PICPA.



World Language



Course offering: Spanish I-AP Spanish Language and Culture
French I-AP French Language and Culture
Latin I-Latin V Honors

Level 1 of language is for students with little or no knowledge of the language. Students will be recommended to levels II and above by their teachers. **Independent study is not an option for a World Language.**

101 FRENCH LEVEL I
101A GRADE 8

1 Credit
6 Periods/Cycle/All Year

This course is designed to give the student a basic knowledge of the sounds, vocabulary, and sentence patterns of French. Students are assessed on the skills that they demonstrate in the four basic skills of communication: listening, speaking, reading, and writing. Frequent interactive activities provide students with the opportunity to hear and imitate a variety of native speakers talking at normal speed. These activities, as well as paired speaking activities, help the student practice and improve listening and speaking proficiency. Daily class participation is essential to development of speaking proficiency and acceptable pronunciation. Communication takes place in both English and French and students are expected to use the target language with both teacher and classmates as much as possible. Writing practice reinforces the vocabulary and grammatical structures in activities including short answers, complete sentences, and brief personalized paragraphs. In addition, students are introduced to a number of reading strategies such as scanning for information and drawing inferences in reading selections.

The study of daily life in France and other Francophone countries is incorporated within the vocabulary and grammatical concepts of each unit. Identification of Francophone countries in relationship to their locations on a world map help students to see the impact of the French language and culture beyond the borders of France.

102 FRENCH LEVEL II

1 Credit
6 Periods/Cycle/All Year

French Level II, like Level I, focuses on the development of the four skills of communication: listening, speaking, reading, and writing. The course begins with a review of and builds upon basic vocabulary and structures introduced in French I; however, in French II, there is greater emphasis on self-expression, vocabulary building and use of French in speaking and writing. Frequent interactive activities, as well as paired activities, reinforce these skills. At this level, students' progress from simple repetition to production and adaptation of new material as they are required to ask for and give information on a given topic.

In the French Level II course, students are presented with various writing strategies such as writing letters and narrative accounts. Reading practice continues by learning additional reading strategies such as note taking, interpreting graphs and charts, and recognizing word families. Communication takes place mostly in French, and students are expected to use the target language for communication with both the teacher and peers at their appropriate level. The cultural study of the Francophone culture continues with a focus on France. Upon completion of this course, students will have acquired a command of the key vocabulary and structures of fundamental French as well as an appreciation of the culture of French-speaking people.

103 FRENCH LEVEL III

1 Credit
6 Periods/Cycle/All Year

French Level III continues the development of the four basic skills: listening, speaking, reading, and writing, with a large emphasis on speaking. Students are encouraged to experiment further with their use of the language and to apply prerequisite vocabulary and structures in more complex speaking activities; thus, all communication takes place in French. The course begins with a review of vocabulary and structures introduced in French II. New grammatical structures and verb tenses are introduced at this level, which are incorporated and practiced through frequent writing activities. Students will begin analyzing and interpreting French literature as well as current event articles to aid in learning about French culture and customs.

104 FRENCH LEVEL IV – HONORS**1 Credit
6 Periods/Cycle/All Year**

This course provides a foundation for advanced study of French. Students are asked to comprehend, discuss, and respond to questions on more challenging excerpts from Francophone literature. At this level, students are expected to synthesize and apply, in both speaking and writing, vocabulary and structures learned in previous years of study. It is the student's willingness to use French as much as possible in interacting with the teacher and other students, as well as a student's ability to work independently that will determine how relevant and productive this year's learning experience will be. French is used in all classroom communication to discuss, evaluate, and reflect.

105 AP FRENCH LANGUAGE**1 Credit
6 Periods/Cycle/All Year**

Advanced Placement Course in French language is a rigorous course designed to refine students' listening, reading, writing and speaking skills so that they communicate fluently and accurately in French at an advanced level. Throughout the year, students will study advanced literature, sophisticated vocabulary, and advanced grammatical structures. The instructor will present the material in a manner that reinforces the techniques employed in the Advanced Placement examination. For further preparation, students will take practice examinations as well as learn strategies to be used when taking the examination. Candidates for the Advanced Placement Course in French must have completed Honors French IV as a prerequisite.

111 SPANISH LEVEL I**111A GRADE 7 or 8****1 Credit
6 Periods/Cycle/All Year**

Spanish I is designed for students who have no prior experience with Spanish. Emphasis is placed on the interpretation of written and spoken Spanish via stories and authentic resources. Only 7th Graders enrolled in Spanish I are eligible to advance to Advanced Placement (AP) Spanish Language and Culture their senior year.

112 SPANISH LEVEL II**112A GRADE 8****1 Credit
6 Periods/Cycle/All Year**

Spanish II is designed for students who have successfully completed Spanish I. This course continues to build upon the basic skills developed in Spanish I with a major focus on developing communicative skills and cultural understanding. The class is conducted primarily in Spanish and students are expected to use level-appropriate language with the teacher. Prerequisite: Spanish I

113 SPANISH LEVEL III**1 Credit
6 Periods/Cycle/All Year**

Spanish III is designed for students who have successfully completed Spanish I and II. In this course, greater emphasis is placed on grammar, communicative skills, self-expression, interpretation of authentic written/audio texts and cultural understanding. Students move away from using simple, memorized phrases toward the production of spontaneous communication. The class is conducted primarily in Spanish and students are expected to use level-appropriate Spanish with both the teacher and their peers. Prerequisite: Spanish II

114 SPANISH LEVEL IV – HONORS**1 Credit****6 Periods/Cycle/All Year**

Spanish IV Honors is designed for motivated students who have achieved an A or B in Spanish III. In this course, greater emphasis is placed on developing more complex communicative skills, interpreting authentic written/audio texts and comparing the cultural practices, perspectives and products of the Spanish-speaking world with those of their own culture. Students are expected to be self-motivated to complete work independently outside of the classroom. The class is conducted in Spanish and students are expected to be able to express ideas coherently and spontaneously in Spanish with both the teacher and their peers. Spanish IV students who maintain a B average or higher are eligible for induction into the National Spanish Honor Society. Prerequisite: Successful completion of Spanish III with a final grade of an A or B. Spanish IV Honors is a required course in the sequence of study.

115 SPANISH LEVEL V – HONORS**1 Credit****6 Periods/Cycle/All Year**

Spanish V Honors is designed for highly motivated students who have achieved an A or B in Spanish IV Honors. In this course, students further develop their communicative skills and understanding of the products, practices, and perspectives of the target cultures and more intensely make linguistic and cultural comparisons, while touching on each theme of the AP Spanish Language Curriculum Framework. Active participation is essential in this collaborative, student-driven environment. The class is conducted entirely in Spanish and students are expected to be able to express ideas coherently and spontaneously at length in Spanish with both the teacher and their peers. Spanish V students who maintain a B average or higher are eligible for induction into the National Spanish Honor Society. Prerequisite: Successful completion of Spanish IV Honors with a final grade of an A or B. Spanish V Honors is a required course in the sequence of study.

131 AP SPANISH LANGUAGE**1 Credit****6 Periods/Cycle/All Year**

The Advanced Placement Spanish Language and Culture Course is the sixth year of Spanish. In this rigorous course, students will delve into the recommended contexts for the six global themes with the use of the text *Temas AP Spanish Language and Culture* and the worktext *AP Spanish: Language and Culture Exam Preparation* to communicate as stated in the AP Spanish Language and Culture Curriculum Framework to “demonstrate an understanding of the culture(s), incorporate interdisciplinary topics (Connections), make comparisons between the native language and the target language and between cultures (Comparisons), and use the target language in real-life settings (Communities). Students are required to engage in real-life activities outside of the classroom to enrich their language and culture experiences. Pre-requisite: Successful completion of Spanish V Honors with a final grade of an A or B.

116 LATIN LEVEL I**1 Credit****116A GRADE 8****6 Periods/Cycle/All Year**

Latin I gives the students an introduction to the language of the ancient Romans. The course consists of learning noun declensions, verb conjugations, and the basic syntax associated with the classical language. Whenever possible, Latin’s relationship to the English language is explored through sentence construction as well as vocabulary study. Latin roots, prefixes, and suffixes as well as Latin expressions and abbreviations are stressed and noted for their influence on both the English language and American culture. In addition, there are readings of Latin stories based upon the culture, history, and mythology of the Romans. To augment the students’ appreciation for the language, the classes

enjoy films about Roman culture, myth, and legend. Finally, there are special emphases placed upon the influence of Latin on the legal and medical fields of study.

117 LATIN LEVEL II

1 Credit
6 Periods/Cycle/All Year

For the sake of reinforcement, Latin II begins with a brief review of the grammar covered in Latin I. The class then continues its study of grammar. The grammar includes pronouns as well as irregular and deponent verbs. There continues to be a strong emphasis on the study of Latin vocabulary, specifically words that commonly appear on the SAT and other standardized assessments. The students pursue more rigorous translation of stories based in Roman history and myth. A continuation of the study of legal and medical Latin material is conducted.

118 LATIN LEVEL III

1 Credit
6 Periods/Cycle/All Year

This course begins with an intense grammar review followed by more advanced grammar constructions. The class learns participles, gerunds, gerundives as well as the subjunctive mood. Students continue to study Latin vocabulary, history, mythology, and medical and legal Latin. The class also translates an anthology of writings from Roman authors in order to broaden their awareness of classical literature.

119 LATIN LEVEL IV – HONORS

1 Credit
6 Periods/Cycle/All Year

This is a course of more advanced literary study, focusing on Caesar's *De Bello Gallico*, Livy's *Ab Urbe Condita*, and Ovid's *Metamorphoses*. The course aims to complete the study of Latin grammar. Grammar skills are perfected through the inclusion of grammar drills and review quizzes. Latin poetry is introduced with an emphasis on scansion, style, and literary interpretation. The class pursues a more advanced approach to the study of historical and mythological concepts. Finally, the study of the influence of Latin on law and medicine continues.

120 LATIN LEVEL V – HONORS

1 Credit
6 Periods/Cycle/All Year

In Latin level V, the class researches the background information behind and then translates Virgil's *Aeneid*. Grammar skills continue to be kept sharp through the inclusion of drills and grammar review quizzes. The students' vocabulary skills are strengthened through intensive drilling of old vocabulary as well as a focus upon the vocabulary found in Virgil's *Aeneid*. For the sake of honing their translating skills, the students write English sentences into Latin. Finally, the class is introduced to the study of Medieval Latin.



Science



*Please inform your student's teacher in writing at least two weeks in advance of any objections you have to laboratory dissection of preserved specimens. The teacher will then plan alternate learning experiences in lieu of dissection.

270 ACADEMIC LIFE SCIENCE
271 ADVANCED LIFE SCIENCE

1 Credit
6 Periods/Cycle/All Year

The 7th grade Life Science program deals with the scientific investigation of living things. Major topics include characteristics and classification of living things, cells and cell processes, genetics, evolution and ecology. Cooperative inquiry-based activities are employed to reinforce concepts and to teach important analysis skills. In addition, students engage in a variety of assessments to demonstrate their knowledge of the concepts. The Advanced Life Science course (271) is an accelerated course geared toward students that are interested in a deeper exploration of course materials while building strong problem-solving, analytical reading and technical writing skills.

284 EARTH AND SPACE SCIENCE
286 ADVANCED EARTH AND SPACE SCIENCE

1 Credit
6 Periods/Cycle/All Year

The 8th grade Earth and Space Science course is a year-long academic course designed to introduce students to selected topics of earth features and processes, as well as atmospheric and astronomical principles. Students will also be exposed to the chemistry and physics behind the nature of the Earth and Space sciences. The sequence and scope of instruction will vary between Plate Tectonics, Physical Geology, Geologic Time, Meteorology, and Astronomy. Included will be selected STEAM related inquiry-based activities and internet research topics with each section.

203 PHYSICAL SCIENCE

1 Credit
6 Periods/Cycle/All Year

Physical Science is a ninth-grade course which introduces students to the major topics of physics including: motion, forces, momentum, work, power, energy, waves, sound, and light. Inquiry-based activities, demonstrations, and projects are employed to reinforce concepts. Students engage in a variety of assessments to demonstrate their knowledge of concepts. This course applies mathematical principles as well.

202 ACADEMIC PHYSICAL SCIENCE

1 Credit
7 Periods/Cycle/All Year

Physical Science is a ninth-grade lab-oriented course which introduces students to the major topics of physics including: motion, forces, momentum, work, power, energy, waves, sound, and light. Cooperative laboratory activities, demonstrations, and projects are employed to reinforce concepts and teach laboratory skills. Students engage in a variety of assessments to demonstrate their knowledge of concepts. This course applies mathematical principles as well.

285 PRINCIPLES OF ELECTRICITY

.5 Credit
6 Periods/Cycle/1 Semester

This 9th-12th grade semester course will study the basics of electricity: electric charges, forces, and currents. Students will conduct STEAM related activities to determine the relationship between electric potential, current, and resistance in order to construct a variety of circuit combinations. This course covers physics content. 9th and 10th grade students will get priority in scheduling.

287 PHYSICS OF SPACE**.5 Credit****6 Periods/Cycle/1 Semester**

This 10th – 12th grade semester course will look at a variety of astrophysics related topics, including topics from current events. Topics covered will include gravity, getting humans into space, the makeup of the universe and solar systems, and the life cycle of stars. The course is designed to expand on students' understanding of the physical sciences with an emphasis on how physics principles are applied. The students will learn through creating and contributing to a collaborative, student-centered classroom environment. Laboratory and problem-solving calculations require math skills primarily from Algebra I & II. A grade of C or better in Algebra II is required prior to taking this course.

206 BIOLOGY*1 Credit****6 Periods/Cycle/All Year**

Biology is an instructional program designed for biology students at all ability levels. Units of study include: The Nature of Life (The Cell as the Basic Unit of Life), The Continuity of Life, and Ecological Relationships. Students will acquire a clear understanding and mastery of key biological concepts and ideas. They will develop an awareness of the importance of biology as an integral part of their everyday lives. STEAM instructional design is utilized throughout the curriculum.

205 ACADEMIC BIOLOGY*1 Credit****7 Periods/Cycle/All Year**

Academic Biology is a lab-oriented course designed for the college-bound student. Biology concepts and laboratory skills will be mastered in the following areas: ecology, cellular biology, genetics, and evolution. Dissections are included in the prescribed course work. Students will utilize STEAM instructional design in this course.

201 HONORS BIOLOGY I*1 Credit****8 Periods/Cycle/All Year**

This course is a STEAM based course for a hands-on approach to biological concepts. Unit areas of work covered in the course include the following: The Nature of Life (The Science of Biology and the Chemistry of Life); Cells (Structure & Function, Photosynthesis, Cellular Respiration, and Mitosis); Genetics (Nucleic Acids, Genetic Engineering, and The Human Genome); Evolution (Darwin's Theory of Evolution, Evolution of Populations, History of Life, and Classification), Ecology (Biosphere, Ecosystems & Communities, Populations, and Humans in the Biosphere). Students need an 'A' or 'B' grade in both Advanced Physical Science and Advanced Earth and Space Science along with both teacher recommendations to gain entrance into course 201.

212 HONORS BIOLOGY II*1 Credit****8 Periods/Cycle/All Year**

This course is designed for the student with a strong interest in the Biological Sciences, yet desiring a less rigorous approach than AP Biology. The course is STEAM based for a hands-on approach to biological concepts. The topics will include Biochemistry, Microbiology, Biotechnology, and the relationship of structure and function in animals. Prerequisites: An A or B in Biology 201 or an A in Biology 205 and an A or B in Chemistry 204 or an A in Chemistry 207.

213 AP BIOLOGY - GRADES 11 - 12*1 Credit****9 Periods/Cycle/All Year**

The course is designed to be the equivalent of a college introductory biology course. The pace is intensive and requires a great deal of time on the part of the student. A college text is used and emphasizes recent concepts and techniques in biology. The STEAM related lab activities place an emphasis on the biochemical aspect of biology. These activities are often ongoing and may require time spent outside the laboratory periods. A summer assignment is required. The topics covered include: Ecology, Chemistry of Life, Cells, Cellular Energetics, Heredity, Molecular Genetics, Evolutionary Biology, Diversity of Organisms, and cell communication. Prerequisites: An A or B in Biology 201 or an A in Biology 205 and an A or B in Chemistry 204 or an A in Chemistry 207.

210 CHEMISTRY

1 Credit
6 Periods/Cycle/All Year

Chemistry is an instructional program designed for students of all ability levels. The units of work include: Alchemy: Matter, Atomic Structure and Bonding; Smells: Molecular Structures and properties; Weather: Phase Changes and Behavior of Gases; and Toxins: Stoichiometry, Solution Chemistry, and Acids and Bases. Students will develop an understanding of key chemical concepts through STEAM instructional design relating the material to practical, everyday applications.

207 ACADEMIC CHEMISTRY

1 Credit
7 Periods/Cycle/All Year

Academic Chemistry is a lab-oriented course designed to meet the needs of college bound students not planning to major in a science-related field that utilizes STEAM instructional design. The units of work include: Alchemy: Matter, Atomic Structure and Bonding; Smells: Molecular Structures and properties; Weather: Phase Changes and Behavior of Gases; and Toxins: Stoichiometry, Solution Chemistry, and Acids and Bases. Students taking this course should be confident using their mathematics skills in Algebra I.

204 HONORS CHEMISTRY

1 Credit
8 Periods/Cycle/All Year

Honors Chemistry I is designed for those students who have demonstrated academic success in the sciences and in mathematics. The material is primarily quantitative in nature, but also includes a number of qualitative units of study. It includes extensive STEAM related activities stressing the proper and safe use of chemicals and equipment. The units of study include, but are not limited to: Introduction to Chemistry; Problem-solving using Dimensional Analysis; Atomic Theory and Structure; The Periodic Law; Formulas and Chemical Nomenclature; The Mole Concept and Stoichiometry; and Gas Laws. Students desiring to take this course must have a substantial proficiency in math and biology. This includes a grade of an A or B in Honors Biology I or an A in Academic Biology. Students taking this course should be confident using their mathematics skills in Algebra I and II. Both the math and science sequences must be completed prior to taking this course. A summer assignment will be required.

238 AP CHEMISTRY

1 Credit
9 Periods/Cycle/All Year

This course is designed for students who plan to major in Chemistry, a Physical Science, Engineering, or Medicine; and is equivalent to a college introductory course taken by these majors.

Classroom work includes, but is not limited to: Atomic Structure and Properties, Intermolecular Forces and Properties, Chemical Reactions, Kinetics, Thermodynamics, Equilibrium, Acids and Bases, and Applications of Thermodynamics.

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. This course prepares students for the Advanced Placement Exam, which may allow them to earn college credit while in high school. As a result, this course is a rigorous study of chemistry focused on lab-work and depth of understanding of topics. The coursework is centered around four “Big Ideas” described in the AP Chemistry curriculum framework provided by the College Board. The laboratory experience includes a combination of science practices. At least 25% of class time is to be spent engaged in laboratory activities.

The pace is intensive and requires considerable study time by the student. A college level textbook is employed and the problems are of college level and similar to those taken on the AP examination. Appropriate STEAM related experiences will be provided and are used to illustrate and enhance the concepts covered in the classroom. Summer assignments will be required.

A grade of A or B in Chemistry 204 or an A in 207 is required prior to taking this course. A grade of A or B in Honors Algebra 2 or an A in its academic equivalent is required prior to taking this course. Precalculus must be completed or taken concurrently.

214 ACADEMIC PHYSICS - GRADES 11 - 12

**1 Credit
7 Periods/Cycle/All Year**

This course focuses on problem solving skills and strategies and the principles of physics. The students will apply their understanding of the physics principles and basic problem-solving skills during inquiry-based activities. Laboratory and problem-solving calculations require math skills primarily from Algebra I & II in addition to basic right triangle Trigonometry. Topics covered are: Mathematical Concepts; Kinematics; Forces and Newton's Laws of Motion; Projectile Motion; Circular Motion; Work and Energy; Impulse and Momentum; Rotation; Simple Harmonic Motion; Waves and Sound; Electric Circuits; and Light. A grade of C or better in Algebra II is a prerequisite prior to taking this course.

209 HONORS PHYSICS

**1 Credit
8 periods/Cycle/All year**

This course is designed for the student planning to major in a physical science or engineering in college but desiring a less rigorous approach than AP Physics. A college text is used and the problems are all college level. Emphasis is placed on the application of the theories and Laws of Physics through inquiry-based activities. The mathematics level is straightforward but is intense. Students taking this course should be confident using their mathematics skills in Algebra I, II and basic right triangle Trigonometry. Successful completion of or current enrollment in a Pre-calculus course is highly suggested. The topics covered are: Introduction to Mathematical Concepts; Kinematics; Forces and Newton's Laws of Motion; Circular Motion; Work and Energy, Impulse and Momentum, Rotation, Elasticity and Simple Harmonic Motion, Waves and Sound, and Electricity.

208 AP PHYSICS, LEVEL I

**1 Credit
9 Periods/Cycle/All Year**

This course is designed for the student planning to major in a physical science or engineering at college. The pace is very intensive and the mathematics level stresses the concepts of calculus, although calculus will not be used. A college text is used and the problems are all college level. This combined with the intensity of coverage will require considerable time spent on study by the student. Appropriate laboratory inquiry-based activities will be provided with an emphasis to illustrate and enhance the concepts covered in class. A grade of A or B in Honors Algebra II or A in Algebra II is

required prior to taking this course. Successful completion of or current enrollment in a Pre-calculus course is required.

***220 ANATOMY AND PHYSIOLOGY - GRADES 11 - 12**

**1 Credit
6 Periods/Cycle/All Year**

This course is designed for students with an interest in a health-based career. The course begins with a unit on body orientation and language of anatomy. The course includes an in-depth study of systems of the human body and includes related dissections of mammalian organs. Discussion of current health related issues and several guest speakers are part of this course. A college level text is used and a strong recommendation from a Biology or a Chemistry teacher is recommended. There is a course prerequisite for this Anatomy and Physiology course: Honors or Academic Biology and Honors or Academic Chemistry (Chemistry may be taken concurrently.)

***222 HONORS ANATOMY AND PHYSIOLOGY - GRADES 11 - 12**

**1 Credit
6 Periods/Cycle/All Year**

This course is designed for students with a strong interest in a biomedical field, including veterinary medicine. The course begins with an introduction to the human body and the language used in the medical field. The course leads to an in-depth study of all the systems of the human body and includes related dissections of mammalian organs. A research paper will be required in each semester based on a medical topic assigned by the instructor. Discussion of current health related issues and several guest speakers are part of this course. The final major activity is an in-depth dissection of the fetal pig, in which the structures of each body system are observed and identified. A college level text is used. Biology and Chemistry are both prerequisites, Chemistry may be taken concurrently. A strong recommendation from a biology teacher is recommended. STEAM related and inquiry-based lab activities are utilized throughout the curriculum. There is a course prerequisite for this honors level anatomy and physiology course: an A or B in Honors or an A in Academic Biology.

226 OCEANOGRAPHY - GRADES 11 - 12

**.5 Credit
6 Periods/Cycle/Second Semester**

Oceanography is designed as an introductory course into the various physical, chemical, biological, and geological processes and interactions of earth's oceans. This course will proceed from a study of the physical and chemical properties of seawater, detailing the relief of the ocean floors, sea-floor spreading as it pertains to the theory of plate tectonics, and coastal evolution.

228 METEOROLOGY- GRADES 11 - 12

**.5 Credit
6 Periods/Cycle/First Semester**

This course is a systematic approach to both the underlying principles governing atmospheric changes and the examination of the world's climactic regions and their relationship to man. Emphasis will be placed on the student becoming familiar with the reading and evaluating of common weather instruments to meteorological studies and the understanding of the various forces inherent in earth's weather.

250 ESSENTIALS OF ENGINEERING

.5 Credit
6 Periods/Cycle/Semester

This course offers students of all backgrounds the opportunity to experience the important field of engineering with a special emphasis on the building and designing processes. It aims to broaden participation in engineering by highlighting its impact and challenging student perceptions of the field, with a focus on exploring global engineering challenges and sustainability goals, as well as personal, societal, environmental, and economic impacts of engineering solutions. Examples of topics covered in the course include disaster relief and recovery, worker health and well-being, modern medical devices and procedures, and sustainable cities and communities. The course is primarily for 9th and 10th graders and serves as a foundation for other engineering related courses such as Robotics, Architecture, Advanced Engineering, and CAD. Course may count as a Science or Technology credit. A working knowledge of Algebra I is an important mathematical foundation.

251 ADVANCED ENGINEERING

.5 Credit
6 Periods/Cycle/Semester

Students will learn advanced topics in engineering with a special emphasis on product design and innovation. Skills can be utilized across cultures to address global engineering challenges. Students will learn advanced 3-D printing, product design software such as Fusion 360, data acquisition procedures, and advanced product testing techniques. The course is designed to be a capstone STEAM class that solves real-world problems from an engineering perspective. Advanced Engineering is a semester course that can be taken multiple times to enhance year long projects. Prerequisites include a strong competency in Algebra I and in a lab science such as Biology, Chemistry, or Physics. Advanced Engineering can be taken without having had Essentials of Engineering if a student has had Physics or Chemistry with a teacher recommendation. Course may count as a Science or Technology credit.

252 HONORS ADVANCED ENGINEERING

.5 Credit
6 Periods/Cycle/Semester

This course is designed to prepare students for a career in science and engineering by incorporating the STEAM design and innovation processes at the highest level of all projects. Similar to Advanced Engineering, students gain experiences with advanced 3-D printing, product design software, such as Fusion 360, data acquisition procedures, and advanced product testing techniques. The Honors feature of the course incorporates an increased rigor on mathematical application, analysis, and computer modeling. The course also challenges students in the areas of structural, chemical, and environmental engineering that are foundations of many college programs. The course is designed to be a capstone STEAM class that solves real-world problems from an engineering perspective.

Advanced Engineering - Honors is a semester course that can be taken multiple times to enhance year-long projects. Prerequisites include a strong competency in Algebra I, II and in a lab science such as Biology, Chemistry, or Physics. Advanced Engineering - Honors can be taken without having had Essentials of Engineering if a student has completed and passed Chemistry and/or Physics with a teacher recommendation. Course may count as a Science or Technology for 0.5 credit per semester.

232 FORENSIC SCIENCE - GRADES 11 - 12*.5 Credit
6 Periods/Cycle/Semester**

This course is designed to give students the opportunity to apply scientific techniques to the real world by using crime scene investigations. Topics will include crime scene investigation, finger print analysis, blood spatter analysis, dental and skeletal analysis, hair and fiber analysis, handwriting analysis, drugs and toxicology, and DNA analysis. Knowledge of trigonometry content is helpful, but not required.

234 ENVIRONMENTAL SCIENCE - GRADES 11 - 12**.5 Credit
6 Periods/Cycle/Semester**

This course is designed to give students the opportunity to investigate issues related to the environment. Topics to be covered include human needs, environmental policy, urbanization, soil and agriculture, water resources and air pollution. Inquiry-based activities, demonstrations, and projects are employed to reinforce concepts. Students engage in a variety of assessments to demonstrate their knowledge of concepts.

235 AP ENVIRONMENTAL SCIENCE**1 Credit
8 Periods/Cycle/All Year**

This course is designed to enable students to undertake, as first-year college students, a more advanced study of topics in environmental science. The pace is intensive and will require summer reading as well as a great deal of time on the part of the student. The course utilizes STEAM inquiry design, using scientific principles and concepts to understand the interrelationships of the natural world, to identify and analyze environmental problems of both natural and human-made. The course will also evaluate the relative risks associated with environmental problems, and examine alternative solutions for resolving or preventing them. Prerequisites: An A or B in Biology 201 or an A in Biology 205 and an A or B in Chemistry 204 or an A in Chemistry.



English



Every student in grades 7-12 must be enrolled in at least one full credit English course each year. Students may elect semester courses for additional English credit. These .5 credit courses may be taken in addition to the year-long course but not in lieu of a year-long one (1) credit course.

370 ACCELERATED ENGLISH 7**6 Periods/Cycle/All Year****372 ACADEMIC ENGLISH 7**

Course sequence determines pace and depth of study. Student placement in the English sequence is dependent on teacher and counselor recommendation, final grades, and the results of standardized tests. The emphasis of the seventh-grade English program is on developing the skills and knowledge students need to read, write, and communicate effectively. Major topics studied include fiction, nonfiction, poetry, vocabulary, and literary analysis.

378 7TH GRADE WRITING WORKSHOP**6 Periods/Cycle/All Year**

This heterogeneously grouped course for 7th grade students introduces the writing skills and expectations necessary for success at the junior-senior high school by studying the six traits for quality writing. Students will study the types of writing, practice grammar and vocabulary skills, analyze models of effective essays, and craft their own essays, with an emphasis on text-dependent analysis. Teacher recommendation from this course is a prerequisite for entrance into course 383, 8th Grade Accelerated Writing Workshop.

379 7th GRADE GIFTED SEMINAR

6 Periods/Cycle/All Year

Entrance into course 379 requires a Gifted Individualized Education Plan. The content of this course includes the content of course 378, 7th Grade Writing Workshop, and is taught in a way that is commensurate with the ability of the gifted students who are enrolled.

380 ACCELERATED ENGLISH 8

6 Periods/Cycle/All Year

382 ACADEMIC ENGLISH 8

The eighth-grade English course expands on the reading and writing skills taught in seventh grade so that students are ready for the rigors of the high school English curriculum. Major topics include literary analysis of short stories, poetry, nonfiction, the novel, and student self-selected texts; grammar and mechanics as they apply to student writing, particularly the text-dependent analysis essay; and vocabulary.

383 8th GRADE ACCELERATED WRITING WORKSHOP

3 Periods/Cycle/All Year

Entrance into course 383 is dependent upon a grade of A in course 372 or a grade of A or B in course 370 and the recommendation of the 7th grade Writing Workshop teacher. This is a writing-based course for eighth graders in which students will respond in the informative, persuasive, and narrative modes to both fiction and nonfiction reading selections. This course is a differentiated curriculum for the high-achieving student that will develop productive, complex, abstract, and higher-level thinking skills.

386 8th GRADE WRITING WORKSHOP

3 Periods/Cycle/Semester

This is a writing-based course for eighth graders in which students will respond in the informative, persuasive, and narrative modes to both fiction and nonfiction reading selections. Emphasis will be placed on text-based, multi-paragraph essays. Assessments will be tied to the current PSSA English/language arts scoring guides.

376 7TH GRADE READING

6 Periods/Cycle/All Year

This course is designed to improve the repertoire of reading and study skill strategies of the seventh-grade student who has demonstrated the need for support in these areas. A feature of the course is the HMH Read 180 Universal program, which accounts for the majority of instructional time.

388 8TH GRADE READING

6 Periods/Cycle/All Year

This course is designed to improve the reading skills of 8th grade students who have demonstrated the need for support in this area. The course features use of multiple texts and sources to encourage student engagement and interest in provided readings.

320 READING GRADES 9 - 12**1 Credit
6 Periods/Cycle/All Year**

This course is designed to improve the reading skills of high school students who have demonstrated the need for support in this area. The course features use of multiple texts and sources to encourage student engagement and interest in provided readings.

301 ACADEMIC ENGLISH 9**1 Credit
6 Periods/Cycle/All Year**

Academic English in grade 9 is a class designed to increase communication skill. The class activities include reading both fiction and non-fiction literature, writing, grammar, speech, and vocabulary. Literature is selected in an effort to prepare students for the broader challenge of the senior-high school by emphasizing concepts and interpretation rather than facts. Course content includes the short story, nonfiction, poetry (including epic poetry), drama, and the novel. Students will develop writing skills through a variety of assignments including but not limited to the following: paragraphs, multi-paragraph essays (including one that requires a literary thesis and cited text evidence), and a narrative. Literature and Vocabulary.com are used as the primary sources for vocabulary enrichment. Speaking skills are reinforced informally in discussions and group work as well as formally in prepared presentations and /or speeches.

300 HONORS ENGLISH 9**1 Credit
6 Periods/Cycle/All Year**

This accelerated course is formatted similarly to 9th Grade Academic English; however, a greater emphasis is placed upon independent reading, research, and writing. The selection of students for this course will be based upon teacher recommendation, past performance, and standardized test scores.

319 ENGLISH STRATEGIES– 10th and 11th GRADE**0.5 Credit
3 Periods/Cycle/All Year**

This course is designed to improve proficiency in the language arts as well as reading and writing across the content areas for students who have demonstrated a need in these areas. The following skills will be targeted: reading comprehension, vocabulary development, and various modes of writing. Individual needs will be addressed and assessed throughout the course. Student placement in this course is dependent on standardized test scores and teacher and counselor recommendations.

304 ACADEMIC ENGLISH 10**1 Credit
6 Periods/Cycle/All Year**

Various literary genres and authors are studied through short stories, essays, poetry, plays and novels. Analytical writing in response to fiction and nonfiction will be taught. Vocabulary study is interspersed throughout the year. Quarterly grammar study connects to student writing.

303 HONORS ENGLISH 10**1 Credit
6 Periods/Cycle/All Year**

This is an accelerated course wherein students are required to evaluate critically language and literature. In this course, the development of the essay is emphasized, and students are introduced to

the seminar approach to education, which requires independent research and preparation. Students will also write a research paper, which satisfies the requirement for college-bound students. The selection of students for this course rests upon teacher recommendations, past performance, and standardized test scores.

307 ACADEMIC ENGLISH 11

**1 Credit
6 Periods/Cycle/All Year**

This course focuses on American literature as it developed over four centuries of growth and change by means of a chronological study of American authors, philosophies, literary styles, and techniques. Vocabulary study, speech opportunities, as well as creative and expository writing will provide opportunity for student response to the literature being studied. This course will emphasize the development of the essay-length writing and introduce students to the formal research paper process.

306 HONORS ENGLISH 11

**1 Credit
6 Periods/Cycle/All Year**

Junior students who elect eleventh grade honors and are recommended to participate based on their performances in ninth and tenth grade English courses will read and analyze selected literary works representative of their time, language development, and genre. American literature in the forms of poetry, novels, and plays is emphasized in this course. Students' writing culminates in the production of a research/criticism paper. This course is reading and writing intensive. Class discussions and presentations are the primary means of its facilitation. Finally, while 9th and 10th Grade Honors English are not prerequisites for this course, they offer excellent preparation for it.

310 ACADEMIC ENGLISH 12

**1 Credit
6 Periods/Cycle/All Year**

This course is a combination of literature study and post-secondary preparation. The literature will focus on a chronological study of the great English literary tradition and its impact on British thinkers and literary artists. In addition to written assignments based on the literature, seniors will work on writing skills for the real world, which will include a college essay/personal narrative, a resume, thank-you notes, and professional emails. Grammar review, vocabulary study, and speaking opportunities will be regular components of the course.

312 HONORS ENGLISH 12

**1 Credit
6 Periods/Cycle/All Year**

Seniors who elect twelfth-grade honors English and are recommended to participate based on their performance in eleventh grade English should have a high aptitude for reading literature perceptively and for expressing their responses clearly. While English 300, 303, and 306 or 313 are not prerequisites, they offer the best preparation for this course. This course focuses on the study of contemporary literature and narrative nonfiction. Reading selections will provide students the opportunity to analyze works in a variety of genres. Students will be provided with speaking opportunities, creative and critical writings, research projects, digital collaboration, multimedia presentations, and vocabulary and grammar review, all in preparation for rigorous post-secondary education. In addition to written assignments based on literature, students will study and apply real-world writing skills.

309 AP LITERATURE AND COMPOSITION – GRADE 12 1 Credit
6 Periods/Cycle/All Year

Candidates for the Advanced Placement English Literature and Composition course should have superior aptitude for reading literature perceptively and for clearly expressing their responses in written analysis. While Honors English 9, 10 and 11, or AP Language and Composition, are not prerequisites, they offer excellent preparation for this course. The AP Literature and Composition student will focus on an in-depth study of British and American literatures from the end of the 16th century through the present. Emphasis on poetry, drama, and the novel will continue with the study of modern and contemporary works. The course also includes a study of vocabulary and advanced sentence structure. Students work on developing writing skills of many types—analytical, creative, and research based. Additional preparation for the AP exam occurs throughout the course in the form of practice questions, close reading, seminar-style discussions, and in-class essays written in response to AP test prompts.

313 AP LANGUAGE AND COMPOSITION – GRADES 11 - 12 1 Credit
6 Periods/Cycle/All Year

Candidates for the AP Language and Composition course should have demonstrated achievement in reading and writing that focuses on nonfiction material. While 9th and 10th grade Honors English are not prerequisites for this course, they offer excellent preparation for it. The goal of this course is to engage students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Vocabulary, grammar applications, critical reading and writing, and in-class and out-of-class essays are interspersed throughout the year. Preparation for the AP exam occurs throughout the course in the form of practice questions, close reading, seminar-style discussions, and essays written in response to AP test prompts.

323 NONFICTION WRITING – GRADES 9 – 12 .5 Credit
6 Periods/Cycle/Semester 1 or 2

This elective is open to students in grades 9-12. This course focuses on students creating a varied portfolio of NONFICTION pieces based upon topics of personal student interest. With writing as its primary focus, the course will allow students to explore and create autobiographical writing, journalistic writing (op-eds, feature articles, reviews, data-driven pieces), college essay writing, podcasts, and/or digital/video compositions. This is considered a writing-intensive course and interested students must be proficient writers and be able to meet writing deadlines.

352 HUMANITIES I - GRADES 9 - 12 .5 Credit
6 Periods/Cycle/Semester 1

Students will investigate how the heroic journey manifests across multiple cultures through music, art, literature, philosophy, and film. Implicit in this investigation is the difference between the external journey of the physical world and the internal journey of introspection. Concluding this study, students will form personal and universal definitions of “suffering” through Kafka’s *The Metamorphosis* and will justify and discuss suffering as it manifests itself in the world and in the self.

353 HUMANITIES II – GRADES 9-12 .5 Credit
6 Periods/Cycle/Semester 2

Humanities II is concerned with two fundamental questions: the idea of love and how man perceives his reality. These inquiries will be navigated through music, art, literature, philosophy, and film. The

first part of the semester will focus on the love of other, self, and nature, and will attempt to explain the effects on man when love is absent. The second part of the semester will be concerned with how man understands his reality. Through the study of surrealism, Lewis Carroll's *Alice's Adventures in Wonderland* and other appropriate texts, students will form an understanding of the term "reality" and its subjective and objective implications. Although courses 352 and 353 can be taken independently of each other, the two courses, taken in sequence, offer a broader view of the humanities.

354 FICTION WRITING – GRADES 9 – 12

.5 Credit

6 Periods/Cycle/Semester 1 or 2

This elective is open to students in grades 9-12. This course focuses on students creating a varied portfolio of FICTION pieces based upon topics of personal student interest. With writing as its primary focus, the course will allow students to explore and create short stories, poetry, screenplays, podcasts, and/or digital/video compositions. This is considered a writing-intensive course and interested students must be proficient writers and be able to meet writing deadlines.

356 THEATRE ARTS: THE THEATRICAL EXPERIENCE - GRADES 9-12

.5 Credit

6 periods/cycle/Semester 1

This course considers all aspects of theatre. Particular emphasis is placed on exploring acting techniques and developing a performance ensemble. Monologue and scene study, basic stage movement, musical theatre performance, line interpretation, and the development of vocal techniques will be part of the curriculum. Scenic design, lighting, makeup, costuming, and additional areas of technical theatre will also be addressed. Fully staged plays or one acts may be a part of the curriculum.

357 THEATRE ARTS: PERFORMING AND DIRECTING - GRADES 9 - 12

.5 Credit

6 periods/cycle/Semester 2

In this course, particular emphasis is placed on acting techniques, developing an analytical eye for drama, and introducing basic approaches to directing. Students will gain training in character development, performance techniques, script analysis, and stage direction. Students will also integrate the production aspects of technical theatre into their performances. Monologue and scene study, mime, playwriting, and acting and directing techniques will be among the topics to be investigated. Fully staged plays or one acts may be a part of the curriculum. Although courses 356 and 357 may be taken independently of the other, the two courses, taken in sequence, offer a more complete experience in the development of the theatre arts.

360 CINEMA LITERACY: FILM HISTORY AND AESTHETICS GRADES 9 - 12

.5 Credit

6 Periods/Cycle/Semester 1

This course concentrates on the historical development of the film medium. Students view a wide variety of the world's best and most culturally diverse films, while they become articulate about film techniques, genres, terms, directors, and levels of artistic quality. The study will also showcase the union of the arts and technology. Throughout the semester, students participate in viewings, lectures, discussions, debates, and creative projects. Individually and in small groups, students write journals, criticisms, short screenplays, and analysis papers or create independent research projects in film topics. Parental permission for film viewing is required for enrollment.

**362 CINEMA LITERACY: LITERATURE AND FILM
GRADES 9 - 12**

**.5 Credit
6 Periods/Cycle/Semester 2**

This course focuses on films that have been based on literary sources. Students will read the stories, novels, and other genres that have inspired world cinema masterpieces.

Through reading and viewing, we will explore the methods employed by writers and filmmakers in the adaptation process, in order to develop a greater depth of appreciation for both mediums. In-class and out-of-class student work will include the preparation of journal writing, comparisons, criticism, analysis, and short screenplays or other personal projects related to literature and film study. Although courses 360 and 362 may be taken independently of the other, the two courses, taken in sequence, offer a more complete experience in the development of film literacy

AP CAPSTONE COURSES

AP Seminar and AP Research constitute the AP Capstone program. Students can take AP Seminar and AP Research sequentially to complete the AP Capstone program. Alternatively, students can elect to take AP Seminar, for an elective AP credit, and choose not to take AP Research. Sections will be limited for 363 and 364 and requesting this course does not in any way guarantee admission.

363 AP SEMINAR – GRADES 10 - 11

**1 Credit
6 Periods/Cycle/All Year**

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

364 AP RESEARCH – GRADES 11 - 12

**1 Credit
6 Periods/Cycle/All Year**

AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong investigation to address a research question.

In the AP Research course, students further develop the skills acquired in the AP Seminar course by learning research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of approximately 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. AP Seminar is a prerequisite for this course.



Social Studies



It is strongly recommended that students enroll in the courses located in the provided table before choosing additional Social Studies electives. All freshman, sophomores, juniors, and seniors are encouraged to consider taking courses from the electives offered and to consult with teachers regarding specific course content and requirements.

If a student wishes to move from an academic level course to an honors or AP level course, that student must finish the previous year's Social Studies course with a final average of an A. In addition, a student must obtain his/her Social Studies teacher's recommendation.

Social Studies Department Program of Studies 2022-2023

***All recommended courses are bolded**

Grade	Course Offerings
7	Academic 7th Grade Early American History: Founding of a Nation or Advanced 7th Grade Early American History: Founding of a Nation
8	Academic 8th Grade American History: Growth of the Republic Or Advanced 8th Grade American History: Growth of the Republic
9	Academic America and the Modern World or Honors America and the Modern World
	Electives: Current Global Issues, Military History, Academic Psychology
10	Academic World History or Honors World History or AP World History
	Electives: Current Global Issues, Military History, AP United States History, AP European History
11	Academic United States Government & Politics or Honors United States Government & Politics or AP United States Government & Politics
	Electives: Current Global Issues, Military History, Academic Psychology, Criminology, AP United States History, AP European History, AP Psychology, AP Micro and Macro Economics, Honors Economics, Academic Economics, AP World History

12	<p align="center">One Full Year Social Studies Elective or Two Half Year Social Studies Electives</p>
	<p align="center">Electives: Current Global Issues, Military History, Academic Psychology, Criminology, AP United States History, AP European History, AP Psychology, AP Micro and Macro Economics, Honors Economics, Academic Economics, AP World History</p>

470 ACADEMIC 7th GRADE EARLY AMERICAN HISTORY: FOUNDING OF A NATION
471 ADVANCED 7th GRADE EARLY AMERICAN HISTORY: FOUNDING OF A NATION
6 Periods/Cycle/All-Year

This course will investigate the major issues and events that affected the development of the United States from the Revolutionary Era to the beginning of sectionalism and the start of the Civil War. Throughout the course, parallels are drawn between U.S. history and world events so as to involve the student in a global approach to U.S. history. Four major themes will be addressed: *the Revolutionary Era* --- examining the events surrounding the American Revolution and the development of our republic; *the United States Constitution* --- analyzing the basic principles set forth in our government and its impact on American society; *the Expanding Republic* --- we will assess the effects of technological development and territorial expansion in the first half of the nineteenth century; *the Civil War Era* --- an in-depth discussion of the relationship between slavery, sectionalism, secession, and ultimately, the beginning of the Civil War. Analysis of primary sources & documents; critical-thinking skills; text-dependent analysis; and writing skills will be modeled and practiced throughout this seventh-grade course.

480 ACADEMIC 8TH GRADE AMERICAN HISTORY: GROWTH OF THE REPUBLIC
481 ADVANCED 8TH GRADE AMERICAN HISTORY: GROWTH OF THE REPUBLIC

6 Periods/Cycle/All-Year

8th grade Growth of the Republic is a survey course that covers the history of the United States from the Crisis of the Union in the mid-1800s through the early 20th century and the Great Depression. The course begins by examining the various issues and beliefs that contributed to the outbreak of the Civil War. In the aftermath of the war, students will examine the approaches to Reconstruction and its effects. The increasing involvement of the United States in the broader world will be analyzed, including the expansion of America during the Age of Imperialism. The second phase of the Industrial Revolution and its impact on the population and US standing in the world will be addressed. As the early 20th century progresses, students will focus on the emergence of the US as a world power in World War I, and look at the aftermath of the war in units on the Roaring Twenties and Great Depression. Throughout the course, the evolution of the American form of democratic government will be analyzed, as will the development of our economic system. The contributions of and challenges to diverse groups within the US population will be examined within each unit. Students will develop research, analysis and communications skills through individual and group assignments and activities.

402 ACADEMIC AMERICA AND THE MODERN WORLD - GRADE 9 1 Credit
6 Periods/Cycle/All Year

Academic America & the Modern World guides students through the United States' emergence as a modern nation and her new role on the world scene. The course will begin with the global depression of the 1930s and will end with modern current global issues. Topics included in the course will consist of (but not be limited to) US foreign policy and domestic policies, continuities and changes, cultural studies, and various political and economic systems. Areas to be studied will change according to current world conditions; however, the focus of understanding the United States position in the world will be constantly explored. Skills such as reading for understanding, document analysis, writing, and research will be taught and developed.

401 HONORS AMERICA AND THE MODERN WORLD – GRADE 9 1 Credit
6 Periods/Cycle/All Year

Honors America & the Modern World will require students to develop a detailed understanding of how the United States has emerged as a modern nation, her role on the world scene, and the complexities of current global issues. The course will begin with the global depression of the 1930s and will end with the modern day. Topics included in the course will consist of (but not be limited to) US foreign policy, domestic politics, continuities and changes, cultural studies, and comparative political and economic systems. Areas to be studied will change according to current world conditions; however, the focus of understanding the United States position in the world will be constantly explored. Skills such as reading for understanding, document analysis, essay writing, and research will be taught and developed.

415 AP UNITED STATES HISTORY – GRADES 10 - 12 1 Credit
6 Periods/Cycle/All Year

Prerequisites: This course is open to qualified students in tenth, eleventh, and twelfth grades, with selection of students based upon: recommendations from the previous year's social studies teacher and either a B average or higher in a previous honors class or an A average in an academic level course.

Advanced Placement courses are offered to prepare students for the Advanced Placement examination in May. Students who enroll in AP courses must pay for and take the exam. The AP Program is based on the premise that secondary school students can successfully master university-level material. Participating universities and colleges, may grant credit and /or appropriate placement to students who have demonstrated exemplary performance on the AP examination.

The focus of the AP U.S. History course is to help students develop analytic skills and factual knowledge to deal critically with themes of U.S. History. Although this course encompasses much of the same content as the previous American history courses, a greater emphasis is placed on the use of original source materials as the basis of studying a historical period. Advance reading and writing skills will be required of the students in this course. In addition, this course will investigate several key time periods, including, but not limited to: the Pre-Columbian Civilization, Columbian Exchange, Colonial American and Revolution, Expansion and Manifest Destiny, Antebellum Society and Crisis, Civil War, Reconstruction, Growth of American Industry, Populism and Progressivism, Imperialism/World Power, 1920's, Great Depression, World War II, Cold War, America at the End of the 20th Century, and post-9/11 America and the world.

This course will require an in-depth research project and papers on particular events in U.S. history. A summer reading and writing assignment may be required of students enrolling in the course.

Document-based question tests may be administered in the form of after-school or before-school practice sessions throughout the year.

404 ACADEMIC WORLD HISTORY GRADE 10

**1 Credit
6 Periods/Cycle/All Year**

This is a survey course covering human history from its origins in Africa to the present day. Major themes addressed in the course include human origins and settlement, the development and impact of language, writing and culture, human migration, the causes and resolution of conflict, and economic and technological development. Students will also analyze differing philosophical and religious belief systems, examine artistic and literary movements, and compare and contrast historic and modern political systems. A constant theme will be the relationship between past events and present-day life. Varied and differentiated projects will be offered throughout the course.

Primary source readings and analysis will be emphasized throughout the course, and students are expected to read textbook chapters. Writing and vocabulary components will be heavily stressed, from simple paragraph summary to DBQ analysis and preparation. Artistic projects and technological implementation will also be prioritized. The ability to work well independently and in small groups is essential to success in the course, as are good written and oral communication skills.

403 HONORS WORLD HISTORY GRADE 10

**1 Credit
6 Periods/Cycle/All Year**

This is a survey course covering the human history from its origins in Africa to the present day. Major themes addressed in the course include the development of culture, human migration, the causes and resolution of conflict, and economic and technological development. The students will also analyze differing philosophical and religious belief systems, examine artistic and literary movements, and compare and contrast historic and modern political systems. A constant theme will be the relationship between past events and present-day life, often through the use of current events, thesis analysis, and DBQ writing projects.

The text is the primary learning tool, and students are expected to keep up with independent reading schedules in the text. In addition, the reading and analysis of primary sources and utilization of 21st-century learning technology are key elements of the course. The ability to work well independently and in small groups is essential to success in the course, as are good written and oral communication skills.

417 AP WORLD HISTORY - GRADES 10 - 12

**1 Credit
6 Periods/Cycle/All Year**

Prerequisites: Advanced Placement courses are offered to prepare students for the Advanced Placement examination in May. Students who enroll in AP courses must pay for and take the exam. The AP Program is based on the premise that secondary school students can successfully master university-level material. Participating universities and colleges, may grant credit and /or appropriate placement to students who have demonstrated exemplary performance on the AP examination.

This full-year course explores the expansive history of the human world. Students will learn many facts, but also the critical thinking skills necessary to analyze historical evidence. Six themes will be used as a frame of reference in the chronological study of our world's history; these themes are: Interaction between humans and the environment; development and interaction of cultures; state-building, expansion and conflict; creation, expansion, and interaction of economic systems; technology and innovation, and development and transformation of social structures.

An important skill students will acquire in the class is the ability to examine change over time, including the causation of events as well as the major effects of historical developments, the interconnectedness of events over time, and the spatial interactions that occur over time that have geographic, political, cultural, and social significance. It is important for each student to develop the ability to connect the local to the global, and vice versa. Students will learn how to compare developments in different regions and in different time periods as well as contextualize important changes and continuities throughout world history. A summer reading and writing assignment is required of students enrolling in this course.

405 AP EUROPEAN HISTORY- GRADES 10 - 12

**1 Credit
6 Periods/Cycle/All Year**

Prerequisites: This course is open to qualified students in 10th - 12th grade, with selection of students based upon recommendations from the previous year's social studies teacher and either a B average or higher in a previous honors class or an A average in an academic level course.

Advanced Placement courses are offered to prepare students for the Advanced Placement examination in May. Students who enroll in AP courses must pay for and take the exam. The AP Program is based on the premise that secondary school students can successfully master university-level material. Participating universities and colleges may grant credit and /or appropriate placement to students who have demonstrated exemplary performance on the AP examination.

This is an intensive and accelerated history course, covering the major developments and events in western civilization and their impact upon world history from the beginning of the European Renaissance post 1350 through the present day. Equal and substantive analysis is placed upon cultural, social, political and intellectual themes and history. The effect of these events upon the modern world is continually and carefully examined throughout the course, and students are expected to remain informed about current events and news on a regular basis. Major themes in the course include the emergence of national monarchies and nation-states, diplomatic history and geopolitical relations, the evolution of communal and individual rights and obligations, models of economic and political organization, the impact of technological development upon global society and the artistic expression of cultural values and beliefs. The impact and legacy of these topics upon the world at large will be continually assessed and examined throughout the duration of the course.

Advanced reading and writing skills are a major and essential prerequisite in this college-level course. Successful time management and the ability to work independently and cooperatively are also essential. Substantive study time is expected of all students. Considerable emphasis is placed upon the use of primary source materials as the basis for examining an historical period. Weekly readings, research assignments, projects and presentations will provide students the skills to analyze and evaluate the critical themes of European history during this period at the university undergraduate level. There is no summer assignment required for this course.

409 ACADEMIC UNITED STATES GOVERNMENT & CIVICS – GRADES 11 - 12

**1 Credit
6 Periods/Cycle/All Year**

The focus of the U.S. Government and Civics course is to help students develop analytic skills and factual knowledge to deal critically with themes of U.S. Government and Civics. Students who successfully complete this course will be able to understand facts, concepts, and theories pertaining to U.S. Government. Students will be able to analyze and interpret basic data relevant to U.S.

Government, and express their own opinions on this matter while participating in classroom discussions.

In addition, this course will examine the following topics in U.S. Government and Civics: The Constitution, political beliefs and behaviors, political parties, interest groups, mass media, Congress, the Presidency, the Federal Courts, public policy, civil rights, and civil liberties. In addition, a focus on Pennsylvania state and local governmental functions and responsibilities will be covered in this course.

408 HONORS UNITED STATES GOVERNMENT & CIVICS – GRADES 11 - 12

1 Credit

6 Periods/Cycle/All Year

The focus of the U.S. Government and Civics course is to help students develop analytic skills and factual knowledge to deal critically with themes of U.S. Government and Civics. Students who successfully complete this course will be able to understand facts, concepts, and theories pertaining to U.S. Government. Students will be able to analyze and interpret basic data relevant to U.S. Government, and express their own opinions on this matter while participating in classroom discussions.

In addition, this course will examine the following topics in U.S. Government and Civics: The Constitution, political beliefs and behaviors, political parties, interest groups, mass media, Congress, the Presidency, the Federal Courts, public policy, civil rights, and civil liberties. In addition, a focus on Pennsylvania state and local governmental functions and responsibilities will be covered in this course.

416 AP UNITED STATES GOVERNMENT AND POLITICS - GRADES 11 - 12

1 Credit

6 Periods/Cycle/All Year

Prerequisites: This course is open to qualified students in eleventh and twelfth grades with selection of students based upon: recommendations from the previous year's social studies teacher and either a B average or higher in a previous honors class or an A average in an academic level course.

Advanced Placement courses are offered to prepare students for the Advanced Placement examination in May. Students who enroll in AP courses must pay for and take the exam. The AP Program is based on the premise that secondary school students can successfully master university-level material. Participating universities and colleges may grant credit and /or appropriate placement to students who have demonstrated exemplary performance on the AP examination.

The focus of the AP U.S. Government and Politics course is to help students develop analytic skills and factual knowledge to deal critically with themes of U.S. Government and Politics. Students who successfully complete this course will be able to understand facts, concepts, and theories pertaining to U.S. Government. Students will be able to analyze and interpret basic data relevant to U.S. Government, and express their own opinions on this matter while participating in classroom discussions.

In addition, this course will examine the following topics in U.S. Government and Politics: Constitutional underpinnings, political beliefs and behaviors, political parties, interest groups, mass media, Congress, the Presidency, the Federal Courts, public policy, civil rights, and civil liberties. In addition, a focus on Pennsylvania state and local governmental functions and responsibilities will be covered in this course.

412 ACADEMIC ECONOMICS – GRADES 11 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

The primary emphasis of this course is to prepare our students to be functional members in an economic world by providing practical application to real world economic situations. The course is designed to provide each student with a survey of economic principles and practices, which will serve as a basis for understanding the American economy.

Topics included in this course are basic principles of the free-market system, price determination by supply and demand, the role of labor and business in production, consumerism, investment and financial services, banking, sources and use of credit, insurance options and identify protection. Students will also study the importance of economic growth and stability, and the role of government in the economy. Moderate use of consumer math as well as economic graphs and charts will provide an introduction to each student to some of the tools of analysis frequently used in college economics courses.

410 AP MICRO AND MACROECONOMICS – GRADES 11 - 12**1.0 Credit****411 HONORS ECONOMICS****6 Periods/Cycle/Per Semester**

Prerequisites: This course is open to qualified students in 11th – 12th grades, with selection of students based upon: recommendations from the previous year's social studies teacher and either a B average or higher in a previous honors class or an A average in an academic level course.

Advanced Placement courses are offered to prepare students for the Advanced Placement examination in May. Students who enroll in AP courses must pay for and take the exam. The AP Program is based on the premise that secondary school students can successfully master university-level material. Participating universities and colleges, may grant credit and /or appropriate placement to students who have demonstrated exemplary performance on the AP examination.

The purpose of the AP/HONORS Microeconomics course (Semester 1) is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy.

The purpose of the AP/HONORS Macroeconomics course (Semester 2) is to give students a thorough understanding of principles of economics that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price determination, and also develops students' familiarity with economic performance measures, economic growth, and international economics. The usage of monetary and fiscal policy will be analyzed.

A summer reading and writing assignment is required of students enrolling in this course. In addition, students may be asked to participate periodically in after or before school instructional sessions.

442 ACADEMIC PSYCHOLOGY - GRADES 9 - 12**.5 Credit****6 Periods/Cycle/Per Semester**

The psychology course is a fundamental study of the science dealing with behavior. A basic goal of the course is to help students develop self-awareness, self-understanding, and an understanding of others in order that they may recognize the necessity for careful planning in setting realistic life goals. Learning, personality study, mental health, the biology of the brain, and mental illness are some of the major

units that are explored.

445 AP PSYCHOLOGY - GRADES 11 - 12

**1 Credit
6 Periods/Cycle/All Year**

Prerequisites: This course is open to qualified students in 11th – 12th grades, with selection of students based upon: recommendations from two different social studies teachers, one of which must be the previous year's social studies teacher and either a B average or higher in a previous honors class or an A average in an academic level course.

Advanced Placement courses are offered to prepare students for the Advanced Placement examination in May. Students who enroll in AP courses must pay for and take the exam. The AP Program is based on the premise that secondary school students can successfully master university-level material. Participating universities and colleges, may grant credit and /or appropriate placement to students who have demonstrated exemplary performance on the AP examination. Because this is an AP course, students will find it more difficult to earn top grades in this class compared to other AP courses. Setting a high standard has several tangible benefits. Students will learn a great deal of psychology, students will be better prepared for college, and students will be ready to excel on the AP Psychology exam in May.

Designed for students who wish to study human behavior and mental processes at a level that approximates an introductory college course, AP Psychology stresses a scientific approach to the study of psychology. The course exposes students to a wide range of concepts, research findings, and psychological theories while emphasizing application so the students can see how these relate to their own lives. Topics include the historical development of the schools of psychology, research methods, the biological determinants of behavior, altered states of consciousness, sensation and perception, conditioning and learning, cognition and memory, testing individual differences, normal and abnormal personality development, psychotherapy, and social psychology.

Student grades will be determined by performance on tests, quizzes, study guides, readings, and other assignments. A summer reading and writing assignment is required for students enrolling in the course. In addition, students may be asked to participate periodically in after school test taking and assessment sessions.

443 CRIMINOLOGY - GRADES 11 - 12

**.5 Credit
6 Periods/Cycle/Per Semester**

This course explores the types of crime, its history, its causes and the criminal justice system. Criminal procedures and constitutional rights relating to the rights of the accused are examined. The police and prison system are also studied in great depth. Group projects and guest speakers enhance the course.

450 MILITARY HISTORY - GRADES 9 - 12

**.5 Credit
6 Periods/Cycle/Per Semester**

The focus of the course will be the study of military leaders who have been influential throughout the history of the world, like George Washington, Sun Tzu, Peter the Great, Napoleon, Alexander the Great, Julius Caesar and several others. The class will study of the causes and effects of conflict, military battles and heroics, as well as some of the dramatic effects of war, both positive and negative, removing several glamorous aspects from the idea of violent conflict. This course may involve some philosophical debate and discussion about elements of leadership and teamwork, as well.

This course analyzes current global issues and world concerns, the history of their development and impact upon the United States and the rest of the world. Students are encouraged to create and implement viable solutions and strategies to such topics as the modern Middle East, the environment and overpopulation, energy resources and the global economy, AIDS, terrorism and nuclear proliferation, the rise of China and India. Success in Current Global Issues is heavily dependent upon class involvement, research, periodical readings and student analysis. This course also requires numerous student projects, debates and presentations.



Computer Science



Grade	Course Offerings
8	Introduction to Computer Applications (required)
9-12	Intro to Computer Science (Python I) Computer Science: Games & Apps (Python II) Microsoft Office Applications Advanced Software Applications for Business & Industry
10-12	STEM Robotics Honors STEM Robotics I & II Software Design Honors Software Design AP Computer Science Principles AP Computer Science A – Java I & II
11-12	Honors Computer Science – Capstone Honors STEM Robotics III - Capstone

582 INTRODUCTION TO COMPUTER APPLICATIONS - GRADE 8 .5 Credits 6 Periods/Cycle/1 Quarter

This course introduces students to the popular Microsoft Word and Excel programs. It covers the basics of word processing and spreadsheet operations.

501 MICROSOFT OFFICE APPLICATIONS - Grades 9 - 12 .5 Credits 6 Periods/Cycle/Semester 1

This course provides students with valuable business and personal computer skills. Students will learn advanced Microsoft Office techniques, strategies and skills with popular business and personal productivity word processing, spreadsheet, and presentation software. Using Word, Excel, and/or PowerPoint programs, students will follow an exercise-oriented approach to solving practical problems and developing effective presentations.

502 ADVANCED SOFTWARE APPLICATIONS for BUSINESS and INDUSTRY Grades 9 - 12 .5 Credits

Students will learn advanced Microsoft Office techniques, strategies and skills with popular business and personal productivity word processing, spreadsheet, and presentation software. Using Word, Excel, and/or PowerPoint programs, students will follow an exercise-oriented approach to solving practical problems and developing effective presentations. This course may lead to an opportunity for students to obtain Microsoft Office Specialist (MOS) certification by passing a certification exam to validate their skills and advanced their careers. Successful completion of Microsoft Office Applications (501) is a prerequisite for a student to take the MOS certification exam.

504 INTRO TO COMPUTER SCIENCE – GRADES 9 - 12**.5 Credit****6 Periods/Cycle/Semester 1 or 2**

This course, commonly referred to as Python I, is an introduction to computer science and provides students insight into how a computer "thinks" and how it can be used to solve practical problems. Students design interactive programs with graphics and animation using the Python programming language. Students learn about user interface (UI) and user experience (UX) as they design games and practical applications. This course focuses on developing computational thinking and analytical skills that are important for many 21st century career paths. It also satisfies the school technology graduation requirement. Many students follow this semester course with Computer Science: Games & Apps (505) in the spring semester of the same school year.

**505 COMPUTER SCIENCE: GAMES & APPS
GRADES 9 - 12****.5 Credit****6 Periods/Cycle/Semester 1 or 2**

This course, commonly referred to as Python II, extends the Intro to Computer Science course (504) and includes the popular Game Project, a large Python program entirely designed and coded by the student. By the end of the course, students produce their own portfolio of computer programs. Successful completion of Intro to Computer Science (504) is a prerequisite. This course is recommended for those who want to pursue more advanced technology and computer science courses since it is a prerequisite for many of those courses.

**509 AP COMPUTER SCIENCE A - JAVA
GRADES 10 - 12****1 Credit****6 Periods/Cycle/All Year**

Students use the computer language Java to code interactive, object-oriented programs that are graphical and text-based. Students must take the AP Computer Science A Exam at the end of the school year. Earning an A in Computer Science: Games & Apps (505) is a prerequisite.

**510 AP COMPUTER SCIENCE PRINCIPLES
GRADES 10 - 12****1 Credit****6 Periods/Cycle/All Year**

Students study the foundations of modern computing and build socially useful mobile apps. The course covers a range of topics that include programming, algorithms, how the Internet works, digital privacy and security, and the impact of computing on people and society. Students learn to collect and visualize data finding patterns in the tremendous amount of data collected every day. Students apply creativity by producing graphics, animations, and simulations. They collaborate and communicate as they perform research and create group projects. This course is a blend of PSYCHOLOGY focusing on user experience (UX), ART focusing on user interface, SOCIAL STUDIES and BUSINESS focusing on innovation and impact on society, and just enough CODING to create socially useful mobile apps. Students must take the national AP Computer Science Principles exam, which includes a hands-on

performance task. Learn more about this course at mobile-csp.org. To take this course, a student must earn an A or B in the prerequisite course, Computer Science: Games & Apps (505).

515 SOFTWARE DESIGN GRADES 10 - 12

.5 Credit

516 HONORS SOFTWARE DESIGN

6 Periods/Cycle/Semester

Students use professional computer software development practices and learn advanced computer science principles as they create projects and apps with computer languages such as Python, Java, and C++. Successful completion of Introduction to Computer Science (504) and Computer Science: Games & Apps (505) are prerequisites. Significant responsibility is placed on the student to innovate and show initiative as well as to document and reflect his or her learning with an online portfolio. Students are required to submit detailed project proposals that explain and illustrate how the technology is implemented to solve problems. They must also complete work logs with more extensive documentation of all research, activities, and results. Students may incur costs for some self-selected projects and participation in activities or competitions outside of class may be required. Completing Computer Science: Games & Apps (505) is a prerequisite. Earning an A or B in Computer Science: Games and Apps (505) is a prerequisite for 516 Honors Software Design. Either course may be repeated more than once.

**517 HONORS COMPUTER SCIENCE - CAPSTONE
GRADE 11 - 12**

1 Credit

6 Periods/Cycle/All Year

Students design and complete comprehensive projects that use a variety of software and hardware tools to solve practical problems. This culminating course builds upon the skills of computer and mobile app developed in a sequence of prerequisite courses. Students work in teams, perform requirements analyses, write documents that describe their work, and direct much of their own learning. Students may be expected to participate in activities or competitions outside of class. Successful completion of courses 509, 510, or 516 is a prerequisite.

**518 STEM ROBOTICS
GRADES 10 - 12**

.5 Credit

6 Periods/Cycle/Per Semester

In the first level of STEM Robotics, students will familiarize themselves with VEX robotics parts and programming. They will use STEM resources including hardware development with VEX robotics equipment and software development with RobotC, VexCode, and/or other programming languages. Significant responsibility is placed on the student to innovate and show initiative as well as to document and reflect his or her learning. Students may incur costs for some self-selected projects and participation in activities or competitions outside of class may be required. Successful completion of Computer Science: Games and Apps (505) is a prerequisite for 518 STEM Robotics.

**520 HONORS STEM ROBOTICS I
GRADES 10 - 12**

.5 Credit

6 Periods/Cycle/Per Semester

In the first level of STEM Robotics, students will familiarize themselves with VEX robotics parts and programming. They will use STEM resources including hardware development with VEX robotics equipment and software development with RobotC, VexCode, and/or other programming languages. Significant responsibility is placed on the student to innovate and show initiative as well as to document and reflect his or her learning. Students may incur costs for some self-selected projects and participation in activities or competitions outside of class may be required. Earning an A or B in Computer Science: Games and Apps (505) is a prerequisite for 520 Honors STEM Robotics 1.

522 HONORS STEM ROBOTICS II
GRADES 10 - 12

.5 Credit
6 Periods/Cycle/Per Semester

Students research, design, test, redesign, and implement practical solutions to real-world problems with various kinds of technology. They use STEM resources including software development tools to design and work with STEM lab equipment such as 3D printers, CNC machines, laser engravers, wide format printers, and Arduino microcontrollers. Significant responsibility is placed on the student to innovate and show initiative as well as to document and reflect his or her learning with an online portfolio. Students may incur costs for some self-selected projects and participation in activities or competitions outside of class may be required. Earning an A or B in STEM Robotics 1 (518) or completion of Honors STEM Robotics 1 (520) is a prerequisite.

524 HONORS STEM ROBOTICS III/Capstone
Grades 11 - 12

.5 Credit
6 Periods/Cycle/Per Semester

Student research, design, test, redesign, and implement practical solutions to real-world problems with various kinds of available STEM resources. Significant responsibility is placed on the student to innovate and show initiative as well as to document and reflect his or her learning with an online portfolio. Students may incur costs for some self-selected projects and participation in activities or competitions outside of class may be required. This course may be repeated more than once but more extensive projects and detailed project proposals, work logs, and other documentation are required. Completion of Honors STEM Robotics II (522) is a prerequisite.



Art



670 7TH GRADE ART

6 Periods/Cycle/1 Quarter

The seventh-grade art course provides students with experience in a variety of media, techniques, and styles in drawing, painting, and sculpture, and builds on skills acquired in the elementary art program. Students study historical and modern master artists; projects are often based on these studies. Projects are structured toward the acquisition of skills and development of creative self-expression. Students are encouraged to communicate thoughts and opinions about art through written and oral response.

680 8TH GRADE ART

6 Periods/Cycle/1 Quarter

This nine-week art course provides students with increased challenges from 7th grade art in a variety of media, techniques, and styles in drawing, painting, and sculpture. This course is based on the Pennsylvania State Academic Standards for the Arts and Humanities. Curriculum is based on art production, historical and cultural contexts as well as critical and aesthetic responses to art. This course presents an increase in art production, homework and test and quizzes based on content history, production and vocabulary. Cross-curriculum skills are implemented into this nine-week course to account for PSSA standards and needs.

604 INTRO. TO STUDIO ART

.5 Credit
6 Periods/Cycle/Per Semester

Intro. to Studio Art is a course designed for students in grades 9 through 12. Students will explore a broad spectrum of the art world through the use of varied materials and techniques, including painting,

sculpting, drawing, ceramics and printmaking. Through two and three-dimensional projects students will gain a broad background in the many aspects of art making and design. Projects will be based on life experiences, observations, and art history.

608 GLOBAL ART

.5 Credit
6 Periods/Cycle/Per Semester

This mixed-media studio course provides an opportunity to create art using different materials (clay, printmaking, collage, painting, among others) while focusing on thematic ideas in art making. Themes such as identity, story-telling, and ecology are used to inspire and develop meaningful works of art. Students compare and contrast philosophy, style, and techniques and examine art as a reflection of society by viewing artists and artwork from around the world. This course is open to any 9-12 grade student interested in art for personal satisfaction or for art students seeking to develop portfolio work. It is encouraged to take this course if considering Honors Art as a junior or senior.

612 HONORS ART III & IV

1 Credit
6 Periods/Cycle/All Year

Honors Art is a two-part course developed for students who are genuinely interested in art and art-making. Students entering Honors Art should have a sincere interest in art and a commitment to developing portfolio-quality pieces that hone their studio skills to the highest level. This course is offered to students in grade 11-12 who have taken at least three of the pre-requisite art courses listed above. Reading and written assignments are derived from college-level materials, and an increased amount of work outside of the classroom is necessary to reinforce studio techniques and art historical research. Information on art-related careers, further education, and portfolio development is presented throughout the year. Homework, tests, and exams are required. Students may take this course two years to fully cover the rotating curriculum.

Rotation 1: The Canon of Western Art: This component emphasizes portfolio and studio development while broadening student's knowledge of the western canon of art history, beginning with pre-historic art and ending with the mid-1800's movement of Realism.

Rotation 2: Modern and Contemporary Art: This component focuses on modern and contemporary art movements beginning with the birth of Impressionism through Pop, Performance, and Installation Art, focusing on the development of creative self-expression, technical skills, and knowledge of the history and philosophy of art. Prerequisite – Three Fine Arts courses: 604 Intro to Studio Art, 608 Global Arts, 613 Drawing and Painting, Ceramics, Sculpture, Drawing

613 DRAWING AND PAINTING - GRADES 9 - 12

.5 Credit
6 Periods/Cycle/Per Semester

Drawing and Painting is a studio course that provides an in-depth focus in the study of drawing and painting media. This course is open to any 9-12 grade student interested in creating art for personal satisfaction, or to art students seeking to develop portfolio work. Art related issues and skills are further developed through routine homework assignments. Daily work, concentration, and development of skills are emphasized.

614 CERAMICS - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

Ceramics is a studio course that provides an in-depth focus in the creation and study of ceramics including pottery and sculpture. This course is open to any 9-12 grade student interested in art for personal satisfaction or to art students seeking to develop portfolio work. Art related issues are studied through regular homework assignments.

617 COMPUTER ART I - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

This course is designed to introduce students to computer graphics and digital art. Students will learn basic operation of hardware, and software such as Adobe Illustrator and Adobe Photoshop. Students will apply this knowledge to the creation of meaningful works of art, which reflect an understanding of the principles of design and composition. The course is open to any 9-12 grade student interested in making art for personal satisfaction or to students seeking to expand their portfolio. Art related issues and skills are developed through in-class studio projects. This course fulfills the graduation requirement of a .5 credit of a computer/technology course.

619 COMPUTER ART II - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

Computer Art II is offered to students in grades 9 through 12 with the completion of Computer Art I as a prerequisite. More rigorous criteria will challenge students in their problem-solving skills and their prior knowledge of Adobe Photoshop. Both programs will build upon prior knowledge of the basic elements of design as well as meeting the Pennsylvania State standards for Art Education. This course fulfills the graduation requirement of a .5 credit of a computer/technology course.

618 DRAWING - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

This is a studio course that provides an in-depth focus on developing skills in observational/realistic drawing. This course is open to any student in grades 9 to 12 seeking to further develop realistic drawing abilities. The nature of this course differs from Drawing and Painting because its purpose is to develop refined drawing skills in pencil without the strong emphasis on the creation of finished artwork in various media. Areas of study will include units in composition, line drawing, shading and value, perspective, figure and portraiture. Further experience and practice will be developed through routine homework assignments.

621 DIGITAL PHOTOGRAPHY – GRADES 10 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

Digital Photography is a studio course designed for students in grades 10-12 who have an interest in photography as an art media. Students will learn the fundamental mechanics behind using a camera to create images through an integrated, hands-on approach. Students will focus on composition, lighting and subject matter to create meaningful works of art. In addition to learning how to properly compose and expose images in the camera, students will learn to use Adobe Photoshop to manipulate and make adjustments to their photographs. Students will also study and discuss the historical developments of photography and how it plays into our contemporary, visually based culture. This course fulfills the graduation requirement of a .5 credit of a computer/technology course.

622 MIXED MEDIA CRAFT - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

Mixed Media Craft is a studio course designed for students in grades 9-12 who have an interest in working with their hands to create meaningful works of art. Various media are used to create both two-dimensional and three-dimensional works of art. Projects include creative art journals; book binding, paper making, weavings, basketry, and glass slumping. Students will redefine the “rules” of media and production by sewing on paper and water coloring on plaster. Through cultural exploration students will learn various techniques needed to make art that reflects both cultural and personal meaning.

623 SCULPTURE - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

This course provides students with an opportunity to use wood, stone, foam, plaster, wire, metal, clay, and other media, to create free-standing, wall-hanging, mobile, and low relief sculptures. Students will learn how to address positive and negative spaces in their work as well as how to problem solve through their designs. A variety of tools will be used to produce an array of three-dimensional pieces. This course provides a great “hands-on” experience that is appropriate for all levels of artistic ability.

624 PRINTMAKING - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

Printmaking is a studio course that provides an in-depth focus in the creation and study of printmaking including mono-prints, reduction prints, and etching. This “hands-on” course also offers the opportunity to work with alternative materials to modify the prints created in class through book-making processes. This course is open to any 9-12 grade student interested in art for personal satisfaction or to art students seeking to develop portfolio work.

**Music****770 7TH GRADE MUSIC****6 Periods/Cycle/1 Quarter**

7th grade Music reviews the basic elements of music-melody, harmony, rhythm, form, tone color, dynamics, and tempo. In this quarter course, students will explore music through practical application using classroom instruments and technology. Students will engage in non-Western music making traditions in our African Drumming unit, learn basics of guitar and piano, study history of Rock through the 50s, 60s, and 70s, and create original compositions using GarageBand.

780 8TH GRADE MUSIC**6 Periods/Cycle/1 Quarter**

During this quarter course, students will learn about the science of sound and hearing, the progression of contemporary music from 1980 to today, piano keyboarding, film scoring, and the guitar through a succession of class projects and learning experiences.

783 7TH AND 8TH GRADE ORCHESTRA**2 or 4 Periods/Cycle/All Year**

The Junior High Orchestra is a mixed string group for students in grades 7-8. Any student who plays or wants to play violin, viola, cello, or string bass may join the orchestra. They will develop and hone technical and musical skills necessary to perform age and level-appropriate music. Orchestra members perform at the Junior High Winter and Spring Concerts, a district-wide progressive concert, every three years, and may perform at other venues in and outside of school. Students are encouraged to audition and participate in the annual Berks Junior County Orchestra.

782 7TH AND 8TH GRADE BAND**2 or 4 Periods/Cycle/All Year**

The Junior High Concert Band is open to all seventh and eighth grade students. This course meets four times per cycle during the school day. Students will experience a variety of music through rehearsal. They will develop and hone technical and musical skills necessary to perform age and level-appropriate music in two major performances: the Winter Concert and the Spring Concert. Other performances may be added. Students are encouraged to audition for the Berks Junior County Band.

784 7TH AND 8TH GRADE CHORUS**2 or 4 Periods/Cycle/All Year**

Chorus is offered as an elective to any student in Grades 7 and 8 interested in performing a variety of choral music. The chorus is scheduled four times a cycle during the school day. In addition to the fundamentals of choral tone, diction, rhythm and interpretation, students prepare their music to present two major concerts, Spring and Winter Concerts. Students are prepared and encouraged to audition and participate in the annual Berks Junior County Chorus.

701 BAND**1 Credit
6 Periods/Cycle/All Year**

The senior high concert band is open to all students in grades 9-12 who have an interest in performing on band instruments. The goals of band are to experience many forms and styles of music, to promote individual responsibility, confidence, musicianship, and creativity, as well as cooperation, and to learn proper concert etiquette. They will develop and hone technical and musical skills necessary to perform age and level-appropriate music in two major performances: the Winter Concert and the Spring Concert. Other performances may be added. Students are encouraged to audition for the Berks Junior or Senior County Band, as well as District Band. Students are also eligible to participate in co-curricular ensembles such as Marching Band, Jazz Band, Flute Ensemble, and other groups organized by interested students.

702 ORCHESTRA**1 Credit
6 Periods/Cycle/All Year**

The orchestra is open to high school students (9-12) who are interested in playing the violin, viola, cello, or bass. The goals of orchestra are to experience many forms and styles of orchestral music, to promote individual responsibility, confidence, musicianship, and creativity, as well as cooperation, and to learn proper concert etiquette. Students are encouraged to audition annually for county, district, and regional orchestra. Wind, brass, and percussion students from the senior high band will be utilized periodically to create a full orchestra. Band students involved in the orchestra should have had at least five years of instruction, and be one of the primary chairs of their section. The number of students and instrumentation used from the band will be determined by both the orchestra and band directors. The

orchestra will participate in the Senior High Winter and Spring Concerts, and a district-wide progressive concert, every three years. There may also be other opportunities for performances in and outside of school. Opportunities are also available to students with advanced abilities and high interest in orchestra performance to collaborate on more advanced literature through the Small Ensemble.

703 CHORAL MUSIC

1 Credit
6 Periods/Cycle/All Year

Students sing and perform choral literature from a variety of musical periods, while also developing their individual voices. A variety of public presentations and concerts are scheduled as a result of the classroom work; these presentations can include out-of-state concerts, adjudications, competitions, and exchange programs, local, county, district, regional, and all-state concerts, and school assemblies.

Emphasis is placed on sight reading, rhythm, ear training, choral technique, artistic style, and stage presence. Students are prepared and encouraged to audition annually for county, district, and regional festival choruses. Students possessing exceptional ability and interest are encouraged to study voice privately. Additional ensembles are formed as an opportunity to further the student's musical experiences. These ensembles include Chorale (grades 9-12), and Camerata (for advanced musicians grades 9-12).

710 GUITAR

.5 Credit
6 Periods/Cycle/1 Semester

Guitar is open to students in grades 9-12, and intended for students with little or no guitar experience. Students will develop basic playing skills and music literacy. At the end of the course, students will be able to read music and interpret performance instructions for a variety of music styles, including current popular music.

715 MUSIC PRODUCTION & PIANO KEYBOARDING

.5 Credit
6 Periods/Cycle/1 Semester

Students will learn basic piano keyboard playing techniques and music literacy skills. Students will also learn basic music production skills to create projects, arrangements and original compositions using music technology software and digital work stations. Programs used include industry-standard software: Logic Pro and Sibelius.

720 AP MUSIC THEORY GRADES 10 - 12

1 Credit
6 Periods/Cycle/All Year

Students will learn to recognize, understand, and describe the basic processes of music. They will develop skills by listening to reading, writing, and performing a wide variety of music. Students will identify features of pitch, interval, scales, keys, chords, meter, rhythm, and other musical concepts in performed and notated music. Students will learn to notate music they hear. They will also develop sight-singing and composition/arranging skills. In order to join this class students must have at least one year of experience in a Senior High School Ensemble (Band, Chorus, Orchestra). Students who have not been in a school ensemble, but have completed a minimum of five years of private instrumental or vocal instruction, may enroll in the course if concurrently enrolled in a School Ensemble.



Health & Physical Education



880 7TH AND 8TH GRADE PHYSICAL EDUCATION 2 Periods/Cycle/All Year

This course is a requirement for all 7th and 8th grade students. Emphasis in this class is placed on the development and maintenance of physical fitness, as well as motor skills, knowledge and social development.

Each marking period will consist of two physical education units, all of which involve high amounts of moderate-to-vigorous physical activity, such as: Ultimate Frisbee, Soccer, Basketball, Circuit Training, Intro to Weight Training, Flag Football, Floor Hockey, Badminton, Pickleball and Tennis. Physical fitness testing and subsequent grading occurs each quarter and utilizes the FITNESSGRAM testing series.

882 8TH GRADE HEALTH 3 Periods/Cycle/per Semester

This is one of the required quarter courses for all 8th grade students. 8th Grade Health focuses on the lifestyles decisions that individuals must make in order to maximize their well-being. Major content areas include: the systems of the body, exercise and fitness, basic first aid practices, and drug and alcohol abuse.

832 TEAM GAMES .25 Credit 3 Periods/Cycle/Semester 2

Students will participate in sports and games that include but are not limited to: Ultimate Frisbee, Indoor Soccer, Floor Hockey, Invasion Games, Flag Football, and Basketball. Rules, regulations and strategies will be taught for each unit of instruction. Students will be expected to participate at a high level for this course as these games are considered moderate to vigorous forms of physical activity.

840 NET GAMES .25 Credit 3 Periods/Cycle/Semester 1

Students will participate in sports and games that include but are not limited to: Pop Tennis, Badminton, Nitroball, Volleyball, Pickleball, and Table Tennis. Rules, regulations and strategies will be taught for each unit of instruction. Students will be expected to participate at a moderate to high level for this course depending on the level of ability.

852 BACKYARD/RECREATION GAMES .25 Credit 3 Periods/Cycle/Semester 2

Students will participate in games that include but are not limited to: Cornhole, Bocce Ball, Kan Jam, Badminton, Croquet, Ladder Golf, and Spike Ball. Rules, regulations and strategies will be taught for each unit of instruction. Students will be expected to play each game to the best of their ability.

860 THE MIND and BODY CONNECTION

.25 Credit
3 Periods/Cycle/Semester 1

Students will participate in various activities that focus on the improvement of mental, physical and emotional health. Activities will include but are not limited to Yoga, Meditation, Walking, Low-Impact Exercise and Journal Writing. Students will be expected to participate at a level that they feel they can personally maintain.

810 HEALTH EDUCATION

.25 Credit
3 Periods/Cycle/Per Semester

Health Education, which comprises today's critical health issues, is a required three-period per week, one semester class that is highly recommended to be taken in 10th grade. Emphases of study are as follows: mental and emotional health, physical fitness, substance abuse, and human sexuality. The human sexuality portion of the curriculum covers information on sexually transmitted diseases and pregnancy prevention. The materials that will be used in this unit are available for review at any time.

Course 815 - 818 STRENGTH AND CONDITIONING

The Strength & Conditioning course can be scheduled for 3 or 6 days/cycle.

815 STRENGTH AND CONDITIONING

.25 Credit

816 (815 & 816 are semester courses, 817 is a full year)

3 or 6 Periods/Cycle/Semester 1

817

3 or 6 Periods/Cycle/Semester 2

This course is open to all students in grades 9-12 and is one of the options to fulfill the high school physical education requirement.

In this course, students will be instructed in the correct principles and methods of strength training as they experience a variety of weight training and plyometric exercises. The course is designed to develop power, endurance, speed, and strength.

Physical fitness testing and subsequent grading occurs each quarter and utilizes the FITNESSGRAM testing series. Students who are unable to complete all required physical activities due to chronic injury or illness should not take this course, but instead take the regular physical education class.

800 PRINCIPLES of COACHING and OFFICIATING

.25 Credit

801

3 Periods/Cycle/Semester 1

3 Periods/Cycle/Semester 2

Students must be in 10-12 grade to enroll in this course. This elective physical education class provides students with an in-depth perspective of athletics from the nonplayer side of athletics. Students will gain knowledge of the duties and responsibilities a coach has from the youth level through the high school level along with examining the traits and characteristics of some great coaches in history. This class will also examine athletics from the perspective of an official, not only dealing with the mechanics of officiating but also raising awareness of sportsmanship both on the field and from spectators. Students may get the opportunity to volunteer as a coach or official in youth sports leagues within the district. Students could also work towards becoming licensed as an official for various youth sports or potentially PIAA certified upon graduation.

802 DRIVERS EDUCATION THEORY
803

.25 Credit
3 Periods/Cycle/Semester 1
3 Periods/Cycle/Semester 2

Students must be in 10-12 grade to enroll in this course. Driver Education classroom theory provides a solid base of instruction in general vehicle knowledge and steps involved in obtaining a drivers permit. Students will receive instruction regarding attitudes and safe driving practices, explore traffic statistics, fundamental driving skills, PA traffic laws, perceptions of driving, and physical and emotional conditions that affect drivers. Students will also study the effects of alcohol and drugs and the laws restricting the use of these drugs and consequences of use while operating a vehicle. Upon completion of this course, students may qualify for a reduction in car insurance.

820 PERSONAL FITNESS

.25 Credit
3 Periods/Cycle/Semester 1
3 Periods/Cycle/Semester 2

In this course, students will utilize the PLT4M application on their iPads and complete workout programs that are tailored to their prior fitness training knowledge, in-season and off-season athlete status, and personal fitness motivation.

Students will complete workouts during their class meetings but also have the opportunity to continue with their workout program on their own time. If a student chooses to complete a PLT4M workout on his or her own time, he or she will not receive any preferential treatment when grading, as not all students have access to equipment that is needed to complete a workout.

Any student wishing to take Personal Fitness must have successfully completed 2 semesters of Strength and Conditioning. This is to ensure that students have learned safety guidelines and demonstrated proper lifting techniques in the weight room. Student taking this course should be highly motivated and have a genuine interest in their overall fitness, health and well-being. Pre-requisite: 2 Semesters of passing grades in the Strength and Conditioning courses.



Family & Consumer Science



981 8TH GRADE FAMILY & CONSUMER SCIENCES 6 Periods/Cycle/1 Quarter

The curriculum emphasizes personal eating habits, good nutrition, food labels, the functions of the nutrients, and the MyPyramid/MyPlate will be studied and applied in cooking laboratories. During food laboratory classes, personal hygiene, safety, the correct use of equipment, proper measuring methods, and overall good work habits will be stressed. Anorexia and bulimia will also be discussed.

904 FOOD PREPARATION - GRADES 9 - 12

.5 Credit
6 Periods/Cycle/Per Semester

Food Preparation is a cooking course which stresses exact cooking, following a balanced recipe, safety, and sanitation in the kitchen. Nutritional value, buying, storing, and preparing various foods will be studied. Units that will be taught will include, but are not limited to cakes, cookies, pasta, salads, vegetables, pies, fruits, and breads.

Do you like to eat fast food? Do you have a family history of heart problems? Would you like to learn how to adapt recipes to make them healthier and still taste good? Then this is the course for you! We will research obesity and the effects on the body. Discussions on how to decrease calorie intake and increase nutrient intake will be highlighted in this course. How to eat healthy when eating on the run and/or at restaurants will be investigated. In addition, various recipes will be prepared to apply the knowledge of how to adapt recipes so they are healthier but still taste good. These recipes will include foods from fast food restaurants.

914 PERSONAL RESOURCE MANAGEMENT AND FAMILY LIVING GRADE 10**.25 credit 3 Periods/Cycle/Per Semester**

This course encompasses a wide variety of topics that will prepare the student for independent living. Choosing a career, completing various tax forms, budgeting, managing a checking account, understanding how to obtain and keep a good credit score, choosing a place to live, reading and understanding lease agreements, planning good nutrition strategies throughout the life cycle, planning for the readiness of parenthood, and the process of conception, pregnancy, birth, and caring for the newborn are topics that are taught in this course. This course is a mandatory course required for graduation.



Technology Education



Grade	Course Offerings (Some courses have prerequisites.)
7	7 th Grade Exploring Technology (required) 7 th Grade Principles of STEM (required)
8	8 th Grade Applying Technology (required)
9-12	Computer Aided Manufacturing Architectural Drafting
10-12	Multimedia Technology I Multimedia Technology II
11-12	Multimedia Technology III

970 7TH GRADE EXPLORING TECHNOLOGY**6 Periods/Cycle/1 Quarter**

This course is designed to be an exploratory experience involving the technological systems of communication, transportation, and production. Activities will be of a “hands on” problem solving nature. Students will complete various projects as they learn about technology and how it affects them and their surroundings. Students will be introduced to computer programming by creating simple programs using Alice or Scratch. Students will design, create, and troubleshoot a car made from cardboard. Students will create an “All About Me” video project using the iLife software from Apple.

975 7TH GRADE PRINCIPLES OF STEM**6 Periods/Cycle/1 Quarter**

This project-based course will introduce students to a variety of topics in the STEM field. Students will complete hands on activities that include robotics and engineering challenges. Students will also learn to code using Scratch and/or Python on a Raspberry Pi computer.

980 8TH GRADE APPLYING TECHNOLOGY**6 Periods/Cycle/1 Quarter**

This course provides students with a general introduction to the materials processing and management components of a manufacturing activity, as well as a continuation of learning about communication, transportation, and production technology. Instruction will include “hands on” experiences in the safe and proper use of hand tools, as well as techniques in layout and design. Students will get “hands on” and problem-solving experiences constructing a variety of projects.

950 COMPUTER AIDED DRAFTING - GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

This course is designed to introduce the fundamentals of mechanical drawing. Students will learn how to clearly represent objects and shapes using computer-aided drafting (CAD) software. Students will create 3D objects, apply basic animations, and learn to prepare their project to be printed or shared electronically.

951 COMPUTER AIDED MANUFACTURING (CAM) – GRADES 9 - 12**.5 Credit
6 Periods/Cycle/Per Semester**

This course is designed to take student designed parts and prepare them for production using our CNC mill, router, laser cutter, and/or 3D printers. Students will design 3D objects, prepare assemblies, and program the software necessary to generate a finished product. Completed projects will be critiqued for quality and production time in an attempt to maximize quality and efficiency.

956 MULTIMEDIA TECHNOLOGY I - GRADES 10 - 12**.5 Credit
6 Periods/Cycle/Semester 2**

This course is designed as a project-oriented “hands on” introduction to the world of multimedia technology. Students will work with Apple Mac Pro computers, scanners, digital still cameras, Wyo5Live studio equipment, and more, as well as a variety of software including, Final Cut Pro X, Photoshop, QuickTime, and more.

Students will be introduced to videography and learn about proper use and care of video equipment. Apple’s Final Cut Pro X digital editing software will be used to edit student made videos. Instruction will also include experiences in graphic design, layout work, and much more. A variety of individual and team multimedia projects will be copied to CD or DVD. Students will be charged for all blank media and storage cases.

957 MULTIMEDIA TECHNOLOGY II - GRADES 10 - 12**.5 Credit
6 Periods/Cycle/Semester 1**

Multimedia Technology 957 is project-oriented “hands on” course, designed for the video enthusiast, focusing on the audio and video side of the world of multimedia technology. The students will learn how to properly and creatively use digital video cameras. The student will learn pre-production, production, and post-production techniques as they work in the digital format.

Students will work with software such as Final Cut Pro X, Motion, QuickTime, Adobe Photoshop and more. Students will produce videos ranging from sports highlights, class memories, interviews, commercials, family documentaries, comedies, and many more. Students will be required to do “after school” and “weekend” video work, and it is highly recommended that the students have access to a digital video camera. Students will have the opportunity to enter video contests throughout the year. Students will be charged for all blank media and storage cases.

MULTIMEDIA TECHNOLOGY III – LEVEL A/B - GRADES 11 - 12**1 Credit
6 Periods/Cycle/Full Year**

958 Level A – Academic: First time electing Multimedia Technology III as a Junior or Senior

959 Level B – Honors: Second time electing Multimedia Technology III as a Senior

Multimedia Technology III is a full year, project-oriented, "hands on" course, designed for the video enthusiast. Students considering a career in communications should take this course. Students will focus on projects at a higher level of sophistication and technical proficiency than Multimedia Technology I or II. Students will work with professional level software such as Final Cut Pro X, QuickTime Pro, Motion, Soundtrack Pro, and more. Successful completion of Multimedia Technology I (956) or Multimedia Technology II (957) is a prerequisite.

Seniors electing this course will help to direct, lead, and produce a culminating video project as well as other educational videos. Students will help to direct, lead, and produce a Spartan Year in Sports highlight video, sports videos to be used in conjunction with Wyo5Live, as well as produce other exciting and educational videos. Students will be required to do “after school” and “weekend” video work, and it is highly recommended that the students have access to a digital video camera. Students will pay for or supply all blank media and storage cases.